

Food as Medicine: Category Creation, Founder Behaviour, and Market Design in India's Functional Food Ecosystem — A Case Study of GRASA

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Abstract

India's metabolic health crisis — encompassing 101 million diabetics, 136 million pre-diabetics, and rapidly rising rates of hormonal and gut dysfunction — has generated two dominant but structurally incomplete intervention categories: pharmaceutical management and FMCG health food. Neither addresses daily therapeutic nutrition as a primary recovery mechanism. This paper examines how GRASA Millets and Foods Pvt Ltd identified and created an entirely new market category — food-led metabolic recovery — in India's functional food market, and what behavioural economics and category creation theory explain about that process. Employing single case study methodology, the analysis draws on founder interviews, clinical observation data, and customer outcome records across Delhi NCR and Chandigarh. The case is analysed through two theoretical lenses: category creation theory, specifically the four structural characteristics of defensible market categories identified by Lochhead and Maney — proprietary technology, network effects, economies of scale, and branding; and behavioural economics, drawing on Kahneman and Tversky's prospect theory and Sarasvathy's effectuation framework. Three findings emerge. First, category creation in regulated therapeutic consumer markets requires simultaneous behaviour change in two institutionally separate audiences — end consumers and medical professionals — through fundamentally different mechanisms. Second, prospect theory explains premium pricing in therapeutic food markets more accurately than conventional pricing models, and GRASA's case extends the framework to a health investment logic whose return is measured in restored functional lifespan. Third, GRASA's founding logic reveals a hybrid entrepreneurial reasoning mode — the causal identification of the market gap combined with the effectual construction of the solution — undocumented in the existing entrepreneurship literature. The findings contribute to scholarly conversations on category creation,

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behavioural economics of founding, and innovation systems in regulated consumer health markets.

Keywords: Category creation, behavioural economics, therapeutic food, metabolic recovery, effectuation, food tech india.

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Section 1 — Introduction

India is confronting a metabolic health crisis of unprecedented scale. According to the Indian Council of Medical Research (ICMR-INDIAB Study, 2023), India has approximately 101 million individuals living with diabetes and a further 136 million classified as pre-diabetic — figures that represent the largest diabetes burden of any nation globally. Rates of polycystic ovarian syndrome (PCOS), hypertension, irritable bowel syndrome (IBS), and gut dysregulation are rising sharply across urban populations, with Mumbai reporting a PCOS prevalence of 22.5 percent by Rotterdam criteria — among the highest recorded in any Indian urban population (Joshi et al., 2014; Bharali et al., 2022) **14 15**. Paradoxically, India simultaneously bears one of the world's highest rates of protein deficiency — with over 70% of the population consuming inadequate dietary protein — while also facing rapidly rising rates of obesity, a co-existence described by nutritional economists as the “dual burden of malnutrition” (Milind & Chetan, 2011)¹⁹.

This crisis did not emerge spontaneously. Its roots lie in a systematic transformation of India's food system beginning in the mid-twentieth century. The Green Revolution of the 1960s, driven by agricultural policy prioritising yield over nutritional diversity, accelerated the mass adoption of hybrid wheat and rice varieties while displacing indigenous grains — particularly millets — that had formed the biological foundation of the Indian diet for millennia (Pingali, 2012)²³. Concurrent liberalisation of edible oil and refined sugar imports, alongside rapid urbanisation, fundamentally altered daily food consumption patterns across the subcontinent. Traditional food preparation practices — particularly fermentation, which had served as a natural mechanism for improving nutrient bioavailability, reducing anti-nutrients, and supporting gut microbiome health — were progressively abandoned in favour of convenience and cost efficiency.

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This displacement of indigenous food knowledge represents not merely a nutritional loss but an economic and cultural one. India's traditional food systems — built on region-specific millet varieties, seasonal fermentation practices, and locally adapted grain combinations — constituted a form of distributed nutritional intelligence developed over centuries of agricultural and culinary practice. The Government of India's declaration of 2023 as the International Year of Millets, and its active promotion of millet revival under the Atmanirbhar Bharat and Make in India frameworks, reflects a growing policy recognition that indigenous grain systems carry therapeutic and economic value that industrial food systems failed to preserve (Ministry of Agriculture, GoI, 2023). GRASA's founding is situated precisely within this policy moment — applying traditional fermentation knowledge and indigenous millet varieties as the scientific basis for a contemporary therapeutic food system, and thereby contributing to both national nutritional security and the revival of India's ancestral food intelligence.

The consequences of this food system transformation for metabolic and hormonal health have been severe and are disproportionately borne by vulnerable populations. Women face escalating rates of PCOS and hormonal dysregulation. Children are increasingly presenting with early-onset insulin resistance. The elderly contend with compounded metabolic decline in the absence of nutritionally adequate daily food. Urban populations — exposed most acutely to processed food systems and sedentary environments — exhibit the highest disease incidence (ICMR-INDIAB, 2023).

Despite the scale of this crisis, existing interventions have failed to address its dietary root cause. Pharmaceutical approaches manage symptoms effectively only during active medication; withdrawal routinely results in symptomatic recurrence, with documented adverse effects from long-term use (WHO, 2023)²⁸. Dietary interventions — including

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ketogenic, low-carbohydrate, vegan, and high-protein regimes — are typically expensive, nutritionally incomplete when followed without clinical supervision, and physiologically unsustainable for the majority of Indian consumers. The proliferation of social media nutrition influencers has compounded what economists term “information asymmetry” — a structural gap between what food producers know about their products and what consumers can evaluate at the point of purchase or consumption (Akerlof, 1970)³. Commercial functional food products, meanwhile, routinely deploy marketing claims unsupported by the biological processes of their manufacturing — relying on trend-driven positioning rather than demonstrable therapeutic outcomes.

Within this context, GRASA Millets and Foods Pvt Ltd was established not as an additional participant in India's health food market, but as a deliberate effort to create a new market category: food-led metabolic recovery. By reintroducing fermentation as a daily biological process and centering indigenous millet varieties in the Indian diet, GRASA posits that chronic metabolic dysfunction can be addressed at its root cause—the daily food system—rather than through pharmaceutical or supplementary interventions.

This paper examines GRASA's category creation journey through two analytical lenses: category creation theory, specifically the four structural characteristics of defensible market categories identified by Lochhead and Maney (2019)¹⁸ — proprietary technology, network effects, economies of scale, and branding; and behavioural economics, drawing on Kahneman and Tversky's prospect theory (1979)^{15 16} and Sarasvathy's effectuation framework (2001)²⁴. The research question guiding this analysis is: *How did GRASA create and defend a new market category in India's functional food market, and what do behavioural economics and category creation theory explain about that process?*

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The findings contribute to the entrepreneurship literature on category creation in regulated consumer markets and to the FoodTech innovation literature on therapeutic nutrition as a startup opportunity in emerging economies.

Section 2 — Literature Review

Extensive research informs this paper across four principal domains: functional food innovation, fermentation science, metabolic health interventions, and entrepreneurship within regulated consumer markets. However, a critical gap emerges at their intersection: no study has examined how a founder establishes and defends a new therapeutic food category in India through the combined application of traditional biological knowledge and behavioural economic reasoning. This section reviews the literature across four domains and identifies the gap this paper addresses. This information asymmetry problem — identified as a founding insight in GRASA's market analysis — has since been formally acknowledged at the policy level. The proliferation of unqualified nutrition advice in India's digital health space prompted the Department of Consumer Affairs to issue mandatory qualification disclosure guidelines for health and wellness influencers in 2023 — enforceable under the Consumer Protection Act 2019 (Department of Consumer Affairs, GoI, 2023)⁷. The Advertising Standards Council of India (ASCI) simultaneously updated its Influencer Advertising Guidelines to require health and nutrition influencers to prominently display credentials in all content that makes technical health claims (ASCI, 2025)². These regulatory interventions acknowledge what GRASA's founding logic had already identified — that India's metabolic health information environment is structurally compromised by the absence of qualification standards, creating consumer vulnerability that neither the FMCG sector nor the pharmaceutical sector had adequately addressed. GRASA's deliberate deployment of qualified dietitians — professionals requiring rigorous academic training and clinical practice

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under the Indian Dietetic Association's standards, distinct from certification-based nutritionist designations — represents a market response to this regulatory and informational gap that preceded formal government acknowledgement of the problem.

Functional Food Markets and Therapeutic Nutrition

The global functional food market has expanded rapidly over the past two decades, driven by rising consumer awareness of diet-disease relationships and growing dissatisfaction with pharmaceutical-only approaches to chronic condition management (Grand View Research, 2023)¹⁰. In India, this expansion has manifested primarily through two dominant commercial streams. The first is the fast-moving consumer goods (FMCG) health food segment — millet-based snacks, fermented beverages such as kombucha and probiotic drinks, multigrain breads, and high-protein cookies — which has grown significantly in urban markets since 2015 (Agriculture and Agri-Food Canada, 2023)¹. However, as this paper's case analysis demonstrates, the majority of these products deploy health-associated ingredients — millets, fermentation cultures, ancient grains — within processing frameworks that include refined sugars, refined oils, commercial yeast, and synthetic additives, thereby neutralising the biological mechanisms that give these ingredients their therapeutic value (Sharma & Gupta, 2019)²⁵. The result is a market characterised by what this paper terms “therapeutic branding without therapeutic process” — products that communicate health through ingredient labelling while delivering nutritional outcomes indistinguishable from those of conventional processed foods.

The second stream is pharmaceutical intervention — metformin and related metabolic medications, over-the-counter supplements, and nutraceutical formulations — that addresses metabolic dysfunction by modifying biochemical pathways. While clinically effective within their mechanism of action, pharmaceutical interventions are widely documented as requiring

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concurrent dietary modification to achieve sustained outcomes (Inzucchi et al., 2015¹³). A patient managing Type 2 diabetes with metformin who continues consuming refined carbohydrates daily is addressing the biochemical symptom while perpetuating its dietary cause. This structural incompleteness in the pharmaceutical approach to metabolic disease creates what economists identify as an unserved market segment — patients who are medically managed but nutritionally unaddressed.

Fermentation Science and Indigenous Grain Systems

The scientific literature on fermentation as a food processing technology is extensive and well-established. Fermentation is documented to improve protein digestibility, reduce anti-nutritional factors including phytates and tannins, increase micronutrient bioavailability, support gut microbiome diversity, and reduce glycemic response in starchy foods (Nkhata et al., 2018¹²; Hur et al., 2014¹¹). Millet varieties — including finger millet, pearl millet, sorghum, and foxtail millet — are independently documented as nutritionally superior to refined wheat and rice across multiple parameters: higher fiber content, superior amino acid profiles, lower glycemic index, and richer micronutrient density (Shobana et al., 2013)²⁶. The combination of fermentation and millet as a daily food system — the biological foundation of GRASA's product architecture — therefore has robust scientific precedent.

What the literature does not address, however, is the commercial and entrepreneurial challenge of translating this biological precedent into a market category. The science of fermented millets exists. The food-led metabolic recovery market category did not — until GRASA created it. This gap between established nutritional science and actionable market design represents the entrepreneurial opportunity this paper examines.

Significantly, India's indigenous food systems had long integrated fermentation and millet consumption as daily dietary practice — idli, dosa, ambali, ragi mudde, and dozens of

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regional preparations represent centuries of empirically developed therapeutic nutrition (Blandino et al., 2003)⁶. The Green Revolution's displacement of these practices, as established in Section 1, created both the metabolic health crisis and the market opportunity that GRASA was founded to address. The Government of India's recognition of this displacement — through its promotion of millet revival under the Atmanirbhar Bharat framework and the International Year of Millets 2023 — provides policy legitimacy to GRASA's foundational premise (Ministry of Agriculture, GoI, 2023) **20**.

Category Creation in Entrepreneurship Literature

The concept of market category creation — distinct from market entry or product differentiation — has received growing attention in entrepreneurship and strategy literature. Lochhead and Maney (2019) define category creation as the process by which a founder designs not merely a product but the problem frame within which that product is the only logical solution. This requires establishing four structural characteristics that make the category defensible: proprietary technology that cannot be replicated through marketing alone; network effects that compound value as adoption grows; economies of scale that widen the cost and capability gap over time; and brand ownership of the category's defining language.

Prior research on category creation has focused predominantly on technology sectors — software platforms, digital marketplaces, and hardware ecosystems (Suarez & Utterback, 1995; Parker, Van Alstyne & Choudary, 2016) **22 27**. Application of category creation theory to regulated consumer goods markets — particularly food — remains limited. Food markets present distinctive challenges for category creation: regulatory constraints on health claims,

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conservative consumer adoption patterns, and the presence of large incumbents with established distribution. How founders navigate these constraints to establish genuinely new categories is an under-researched area in the entrepreneurship literature.

Behavioural Economics of Founding

The application of behavioural economics to entrepreneurial decision-making has produced a rich body of research examining how cognitive biases, heuristics, and psychological frameworks shape founder behaviour. Kahneman and Tversky's (1979)¹⁶ prospect theory — demonstrating that individuals evaluate outcomes relative to a reference point rather than in absolute terms — has significant implications for understanding pricing decisions in premium health markets. Sarasvathy's (2001)²⁴ effectuation framework — distinguishing between founders who reason causally from a fixed target toward means, and those who reason effectually from available means toward emergent goals — provides a complementary (Moffett & Suarez-Almazor, 2005, pp. 499-505) lens for examining the solution-building phase of GRASA's founding process.

However, the application of these frameworks specifically to food category creation in India's metabolic health market has not been previously attempted. The intersection of behavioural economic reasoning, indigenous food knowledge revival, and therapeutic category design in an emerging market context represents the precise gap this paper addresses.

The Research Gap

Taken together, the existing literature establishes the nutritional science of fermented millets, the scale of India's metabolic health crisis, the theoretical frameworks of category creation and behavioural economics, and the limitations of existing market solutions. What it does not provide is an integrated analysis of how a founder uses behavioural economic

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reasoning to create a new therapeutic food category in a market simultaneously constrained by FMCG convention and pharmaceutical dominance. This paper addresses that gap through a single case study of GRASA. This startup identified the precise intersection of fermentation science, indigenous grain knowledge, clinical nutrition, and category design that no prior market entrant had occupied.

Section 3 — Research Methodology

3.1 Research Design

This paper employs a single-case study methodology, consistent with Yin's (2014) framework for case study research, as the appropriate design for examining a contemporary phenomenon within its real-world context — particularly when the boundaries between the phenomenon and its context are not clearly evident. Category creation in therapeutic food markets is precisely such a phenomenon: it is inseparable from the founder's lived context, the regulatory environment, the clinical ecosystem, and the consumer behaviour patterns that shaped it. A single-case study design enables the depth of analysis that a survey or a multi-case comparative approach would not permit for this type of inquiry.

3.2 Data Sources

The analysis draws on multiple sources of evidence, consistent with Yin's (2014)²⁹ recommendation for triangulation in case study research.

Primary data were collected through structured interviews with GRASA's co-founders and systematic observation of customer outcomes across Delhi NCR and Chandigarh between 2023 and 2026. Initial observations were drawn from the founders' immediate household and social network, providing a purposive starting point for close, longitudinal observation of metabolic health outcomes in urban North Indian women, particularly those experiencing perimenopause, Type 2 diabetes, and lifestyle-related metabolic dysfunction in a high-

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pollution urban environment. These initial observations were subsequently validated and expanded through clinical interactions conducted by Dr. Arun Chaudhary, Founder and Chairman of GRASA, whose patient consultations as a practicing physician offered a structured clinical perspective for assessing and refining early product outcomes.

Secondary data sources include published market research on India's functional food and nutraceutical sectors, ICMR epidemiological data on the prevalence of metabolic diseases, FSSAI regulatory documentation, Government of India policy materials on millet revival, and peer-reviewed literature on fermentation science and indigenous grain systems.

Customer outcome data — comprising self-reported health outcomes from 500+ program participants across Delhi NCR and Chandigarh — has been anonymised and aggregated for analysis. No personally identifiable information is used in this paper.

3.3 Analytical Framework

The case is analysed through two theoretical lenses applied simultaneously, each addressing a distinct but complementary dimension of the research problem. Category creation theory—specifically the four structural characteristics articulated by Lochhead and Maney (2019)¹⁸: proprietary technology, network effects, economies of scale, and branding—establishes a market design framework suited to understanding how a new category is architected and defended in a crowded marketplace.

In parallel, behavioural economics, especially the models developed by Kahneman and Tversky's (1979) prospect theory and Sarasvathy's (2001) effectuation framework, offers a lens for interpreting the psychological and decision-making processes underpinning founder behaviour during the process of category creation. Employing these two frameworks in tandem is essential, as it enables a holistic examination of both the external structural dynamics shaping the emergence of a new market category and the internal reasoning

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strategies that guide entrepreneurial action. This integrated approach captures the interaction between GRASA's market design choices and the founding logic behind those choices, providing a theoretically robust rationale for how new categories are created and sustained in complex, regulated markets.

3.4 Limitations

As a single case study, the findings presented are not statistically generalisable to other FoodTech startups or therapeutic food categories. However, consistent with case study methodology, the findings offer theoretical generalisability; the frameworks developed may be applied and tested in analogous founder contexts within India's emerging functional food market. Furthermore, the potential for reflexivity bias, given the lead author's role as a co-founder of GRASA, is acknowledged. This risk has been mitigated through triangulation across multiple data sources and the application of recognized theoretical frameworks that provide an external analytical structure independent of the founder's perspective.

Section 4 — The Case: GRASA's Category Creation Journey

Section 4.1 — Identifying the White Space

The inception of GRASA resulted from the convergence of two parallel processes: systematic market research into India's functional food and pharmaceutical landscape, and the documented experience of metabolic dysfunction within an urban North Indian household.

Market research conducted by the founders revealed a structural absence in India's health intervention ecosystem. Existing solutions occupied two distinct and disconnected positions. The first was the FMCG health food segment — millet snacks, probiotic beverages, multigrain breads, high-protein cookies — which addressed taste and convenience but not therapeutic metabolic outcomes. The second was pharmaceutical intervention — medications

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managing blood sugar, blood pressure, and hormonal dysfunction — which addressed biochemical symptoms but not daily nutrition. Between these two positions, no product or service existed that functioned as what the founders termed a “symphony” — a coordinated, daily food system designed to address metabolic dysfunction at its root cause through the food a person eats every morning. India, home to the world’s largest diabetic population with approximately 101 million diagnosed cases (ICMR-INDIAB, 2023)¹² had no food-led metabolic recovery category. The category did not exist. It needed to be created.

This market finding was concurrently validated by direct experience. Despite adherence to a disciplined home-cooked diet—free from processed snacks, fried foods, and packaged products—a family member continued to experience poorly controlled Type 2 diabetes. Blood sugar levels remained persistently elevated despite dietary diligence. When complications progressed to compromised eyesight, the attending physician established a clinical threshold: fasting blood sugar must be reduced below 170 mg/dL as a prerequisite for corrective surgery. While the family possessed culinary skills, they lacked guidance on appropriate dietary choices, despite preparing meals at home daily.

This experience crystallised a problem that was neither isolated nor unusual. It was structurally embedded in India’s urban food environment. Delhi NCR — one of the world’s most polluted metropolitan regions, with documented correlations between chronic air pollution exposure and elevated risk of metabolic dysfunction — presented a population simultaneously exposed to environmental metabolic stressors and a food system that had progressively lost its therapeutic capacity (Balakrishnan et al., 2019)⁴. Metabolic disease had become the default subject of personal conversation across family networks and professional circles. Everyone was affected. No one had a workable daily solution.

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The barriers the founders identified were not motivational but structural. First, qualified dietitians were systematically underutilised as a healthcare resource. Unlike physicians, who represent the primary point of contact in India's healthcare-seeking behaviour, dietitians are approached as a secondary referral — accessed only through trusted doctor networks and rarely consulted as a first response to metabolic dysfunction (Krishnaswamy, 2017)¹⁷. Second, the dietary modifications available to a metabolically compromised individual in an Indian household were functionally incompatible with the household's social and culinary realities.

Understanding this incompatibility requires recognition of the significance of daily food in a traditional North Indian household. The typical diet—comprising wheat-based flatbreads, slow-cooked lentils, rice, vegetable curries prepared with substantial cooking fat, and dairy—represents more than nutritional preference; it embodies cultural identity, family ritual, and social participation. These foods are longstanding staples, often consumed by multiple generations. Recommending the adoption of a Western-style low-carbohydrate diet, the purchase of unfamiliar ingredients, and the preparation of separate meals for a diabetic family member constitutes a demand for the complete reorganisation of daily domestic life—a change that most households, irrespective of motivation, are unable to sustain.

Third, and most critically from an economic perspective, the available solutions created a compounding financial burden. Separate dietary regimes for individual family members — a diabetic parent, an aging grandparent with different nutritional requirements, children whose diets were increasingly processed — required separate food preparation, separate ingredients, and separate professional consultations. Each intervention, layered upon existing medication

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costs, transformed metabolic disease management into a significant out-of-pocket expenditure for India's urban middle-class household — neither poor enough for subsidised healthcare nor affluent enough to absorb escalating medical costs without financial strain.

The market gap identified by GRASA was characterized by four simultaneous absences: food that is therapeutically effective without necessitating behaviour change; nutrition compatible with existing Indian taste preferences and multigenerational household dynamics; a daily food format—such as flour for bread, cookies, and everyday staples—that could substitute for existing dietary staples rather than introducing entirely foreign options; and a personalisation component, namely qualified dietitian consultation, capable of optimising outcomes for individual biological variation without imposing additional financial burden.

No existing product or service category addressed all four criteria simultaneously—the FMCG health food market prioritized taste and convenience, but not therapeutic processes. The pharmaceutical system addressed biochemical outcomes but neglected daily nutrition. The dietitian profession provided personalisation but lacked accessibility and scalability. The intersection of these three systems—food, medicine, and nutrition science—constituted the category that GRASA was established to occupy. It is neither a snack nor a medicine, but rather an integrated solution.

Dr. Arun Chaudhary's parallel clinical observations as a practicing physician reinforced and validated what market research and lived experience had already revealed. Patient after patient presented with metabolic dysfunction managed by medication but unaddressed by daily diet. The clinical conversation that should have included food — what to eat, how to prepare it, how to make it feasible within an Indian household — was structurally absent from the medical consultation. The gap was not a gap in medical

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knowledge. It was a gap in the food system's capacity to deliver therapeutic nutrition in a form that Indian families could actually consume, afford, and sustain every single day.

Section 4.2 — Proprietary Technology as Category Anchor (Draft)

Category creation theory holds that a defensible new market category must be anchored by proprietary technology that competitors cannot replicate through marketing alone (Lochhead & Maney, 2019). For GRASA, this anchor is its controlled fermentation methodology. This process innovation transforms the biological structure of indigenous millet grains in ways neither conventional food processing nor simple home fermentation can consistently replicate.

The Biology of the Process — Stated

To understand why GRASA's technology constitutes a genuine moat, it is necessary first to understand what fermentation does to a grain at the biological level. Millet — like most grains — contains naturally occurring compounds called anti-nutrients, principally phytic acid, that bind to essential minerals including iron, zinc, and calcium, preventing the human gut from absorbing them effectively. A person eating unfermented millet may consume adequate quantities of these minerals on paper while absorbing only a fraction of them in practice. Fermentation disrupts this binding mechanism. Beneficial microorganisms — bacteria and wild yeasts naturally present on the grain surface — metabolise the anti-nutrients during the fermentation period, effectively unlocking the grain's mineral content for human absorption (Nkhata et al., 2018).

Simultaneously, fermentation initiates partial pre-digestion of the grain's starch and fibre matrix. The microbial activity begins breaking down complex carbohydrate chains before the food is consumed — reducing the digestive load on the gut, moderating the rate at which glucose enters the bloodstream, and thereby flattening the blood sugar spike-and-crash

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cycle that characterises unfermented grain consumption in metabolically compromised individuals. Fermentation additionally generates B-vitamin synthesis, improves protein quality through amino acid modification, produces short-chain fatty acids that strengthen the gut lining, and

increases the population of beneficial microorganisms in the digestive environment (Hur et al., 2014¹¹).

For individuals experiencing insulin resistance, chronic blood sugar instability, persistent fatigue, inflammatory gut conditions, or challenges with weight regulation, the daily consumption of properly fermented millet yields significant practical outcomes. These include improved digestive efficiency, stabilized energy levels throughout the day, reduced cravings associated with blood sugar fluctuations, and enhanced nutrient absorption—achieved through the biological transformation of daily food rather than pharmaceutical intervention.

What Makes GRASA's Process Proprietary

The fermentation principle is ancient. What GRASA has done is engineer it into a repeatable, scalable, and metabolically optimised industrial process — and this engineering is where the proprietary moat resides.

Home fermentation — the soaking and resting of grains in a domestic kitchen — is inherently variable. Ambient temperature fluctuates seasonally and daily. The microbial population present on grain surfaces varies by source, region, and storage conditions. The fermentation duration is estimated rather than measured. The result is inconsistency: a batch that is therapeutically effective one week may be nutritionally suboptimal or organoleptically unacceptable the next — too sour, insufficiently fermented, or microbiologically unpredictable. Commercial factory fermentation, where it exists in the Indian FMCG sector,

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is typically optimised for taste, texture, and shelf life — not for metabolic outcomes. Artificial cultures, synthetic acidulants, preservatives, and additives are routinely introduced to standardise flavour and extend commercial viability, at the cost of the biological integrity that gives fermentation its therapeutic value.

GRASA's process departs from both approaches through three specific innovations. First, controlled and precise fermentation parameters — exact timing, regulated temperature, monitored humidity, and defined microbial culture management — ensure that every batch undergoes an identical biological transformation, producing consistent therapeutic outcomes regardless of season or production volume. Second, GRASA's methodology draws on the traditional Indian practice of Sandhana Kalpana — a classical fermentation science with documented roots in Indian medical tradition — and scales it using contemporary allopathic clinical food science techniques. This is not the appropriation of tradition as a marketing narrative. It is the application of an empirically validated fermentation principle through modern clinical process engineering, producing a product that is simultaneously rooted in Indian food culture and scientifically reproducible and measurable by contemporary biomedical standards. Third, and critically, GRASA's fermentation is optimised exclusively for metabolic benefit — not for taste, not for shelf life, and not for visual appearance. The biological transformation of the grain is the primary objective. Flavour and texture are engineered to follow from that transformation, not to substitute for it.

Equally significant are the exclusions in GRASA's process. No artificial microbial cultures, additives, synthetic preservatives, or flavour enhancers are used at any stage of production. Fermentation is conducted exclusively by naturally occurring microorganisms acting on FSSAI-certified indigenous millet varieties under controlled conditions. The product delivered to consumers in Delhi NCR is fresh and not shelf-stabilised through

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chemical intervention. This commitment to process integrity without artificial supplementation distinguishes GRASA's fermentation methodology from other commercially available fermented food products in the Indian market, including probiotic beverages and commercially produced fermented dairy products that rely on laboratory-isolated artificial cultures for consistency.

The result is a technology moat that is genuinely difficult to replicate. A competitor can observe GRASA's product category. They can copy the millet ingredient. They can adopt fermentation as a marketing claim. What they cannot easily replicate is three years of controlled fermentation protocol development, the specific parameter optimisation for metabolic outcomes rather than commercial shelf life, and the institutional knowledge embedded in a process that has been refined across 500-plus program participants in Delhi NCR and Chandigarh. The proprietary technology is not a patent — it is a process, a methodology, and an accumulated body of empirical refinement that constitutes GRASA's most defensible competitive asset.

Section 4.3 — Network Effects in the Clinical Referral Model

Category creation theory identifies network effects — the phenomenon whereby a product or system becomes more valuable as more participants join it — as a critical structural characteristic of defensible market categories (Lochhead & Maney, 2019). For most consumer goods companies, network effects are associated with digital platforms, marketplaces, or communication technologies. GRASA demonstrates that network effects can be engineered into a therapeutic food system through deliberate clinical architecture — creating a two-sided network in which the value delivered to patients and to medical professionals compounds with each successful outcome.

The Two-Sided Network — How It Works

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GRASA's clinical referral model operates as a closed-loop system connecting three participants: the referring physician, the patient, and GRASA's dietitian team. Understanding the mechanics of this loop is essential to understanding why it generates compounding network value rather than simple linear growth.

The process initiates when a physician — having assessed a patient's metabolic condition and identified dietary intervention as a necessary complement to medical treatment — either directly informs GRASA of the patient's therapeutic goals or facilitates the patient's registration through GRASA's digital platform. Registration is free. Within two to twenty-four hours of registration, a qualified dietitian contacts the patient, with priority response times calibrated to the severity of the patient's condition and the program they have enrolled in. The dietitian receives the physician's clinical assessment and therapeutic goals for the case before conducting an independent nutritional evaluation of the patient.

This dual-layer assessment — physician clinical judgment combined with dietitian nutritional evaluation — produces a personalised diet solution that integrates GRASA's fermented millet products into the patient's existing daily food routine at precise quantities, timings, and combinations optimised for their specific metabolic profile. The patient does not purchase a generic product. They receive a structured therapeutic nutrition plan in which GRASA's products function as the food-based clinical intervention, delivered fresh to their home in Delhi NCR on a schedule determined by their dietitian.

GRASA's team conducts regular follow-ups to monitor sleep quality, digestive comfort, energy levels, bloating, and other metabolic indicators that precede measurable biomarker changes. Monthly biomarker testing — conducted by the patient through standard pathology services — provides objective outcome data. These results are reported simultaneously to the patient and the referring physician, closing the clinical information loop

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and providing the physician with evidence-based visibility into their patient's dietary intervention outcomes. Noticeable biomarker changes typically emerge within fifteen days of program initiation. The cycle — assessment, intervention, follow-up, biomarker review, plan adjustment — continues until recovery targets are achieved.

The Network Effect Mechanism

The compounding value of this system emerges from what happens at the physician's end of the loop. When a patient's metabolic markers improve under GRASA's dietary program — reducing HbA1c, stabilising fasting blood glucose, improving hormonal panels, or resolving gut dysfunction — the outcome is visible to the referring physician through the biomarker reports. A positive patient outcome benefits not only the patient. It generates clinical evidence that the physician can observe, evaluate, and reference in subsequent patient consultations.

This creates the first network effect: each successful patient outcome strengthens the referring physician's clinical confidence in GRASA's model, increasing the probability of subsequent referrals from that physician. The physician's relationship with GRASA deepens from a single referral into an ongoing clinical partnership — formalised through GRASA's Nutrition Partnership Program, a structured professional collaboration in which participating physicians are integrated into the patient care coordination process and recognised for their role in the therapeutic outcome. This is not a transactional arrangement. It is a clinical network in which physicians function as outcome-accountable partners in their patients' nutritional recovery — an arrangement that aligns with the physician's professional interest in patient outcomes and their practice's reputation for comprehensive metabolic care.

The second network effect operates on the patient side. GRASA's referral data reveal that patient-to-patient referrals constitute a significant growth channel alongside physician

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referrals. A patient who experiences measurable metabolic improvement — reduced fatigue, stable blood sugar, resolved bloating, improved energy — becomes a credible peer advocate within their social and family network. Unlike influencer-driven health recommendations, which the Department of Consumer Affairs has identified as a source of unqualified health misinformation (GoI, 2023), patient referrals within GRASA's network are grounded in personal biomarker evidence. The referring patient can point to their own monthly test results. This evidence-based peer referral carries a credibility that no marketing communication can replicate.

The two networks — physician referrals and patient referrals — reinforce each other. A physician who refers multiple patients generates multiple outcome data points, each of which strengthens both their own confidence and the clinical evidence base available to GRASA. A patient who refers family members brings new participants whose outcomes, if positive, further validate the model to their shared physician. The network becomes more valuable — more clinically credible, more outcome-evidenced, more socially trusted — with each cycle of referral and recovery.

This architecture represents a network effect structurally different from the digital platform network effects typically analysed in the entrepreneurship literature (Parker, Van Alstyne & Choudary, 2016). It is slower to build — clinical trust accumulates over months of biomarker evidence, not milliseconds of user engagement. However, it is significantly more durable. A food delivery platform's network effect can be disrupted by a competitor offering lower prices. A clinical referral network built on physician-observed patient outcomes and evidence-based peer advocacy cannot be disrupted by price competition alone. The trust embedded in the network is not transactional. It is clinical and relational — and therefore constitutes a moat that compounds with time rather than eroding under competitive pressure.

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Section 4.4 — Pricing as Category Signal — Prospect Theory Applied

Among the most consequential decisions in GRASA's category creation journey was its pricing architecture — and among the most instructive aspects of that decision is the internal resistance it generated. When GRASA launched with a trial pack priced at ₹6,000, the economics were immediately unsustainable. Product cost, including logistics, amounted to ₹5,200. A single dietitian consultation added ₹1,500. The margin was negative. The price was not a commercial decision — it was a traction decision, consistent with early-stage startup logic that prioritises customer acquisition and clinical evidence generation over unit economics. However, it revealed something important: even at ₹6,000 — thirty times the price of a premium millet snack — GRASA was not being compared to health food by its customers. It was being compared to the total cost of being metabolically unwell.

This distinction is the foundation of GRASA's pricing philosophy — and it maps precisely onto Kahneman and Tversky's (1979) prospect theory, one of the most empirically robust frameworks in behavioural economics. Prospect theory establishes that individuals do not evaluate outcomes in absolute terms. They evaluate them relative to a reference point — and that reference point determines whether a price feels like a gain, a loss, or a fair exchange. The critical insight for GRASA was identifying the right reference point in its target customer's mind.

The Wrong Reference Point

Early critics of GRASA's pricing — including well-intentioned advisors within the startup ecosystem — evaluated ₹21,000 per month against the reference point of the Indian health food market: millet snacks at ₹150 per packet, protein bars at ₹80, probiotic drinks at ₹30. Against this reference point, GRASA's price appeared not merely premium but irrational — a fifty to hundred times markup on products occupying an adjacent shelf

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position. This is the reference point of a market observer. It is not the reference point of a metabolically compromised patient.

The Correct Reference Point

The patient sitting across from Dr. Chaudhary — managing Type 2 diabetes, PCOS, or chronic gut dysfunction — is not comparing GRASA to a millet snack. They are comparing it to the total annual expenditure of being metabolically unwell. This expenditure for a typical urban middle-class Indian household managing one metabolic condition includes monthly physician consultation fees, ongoing medication costs, periodic specialist referrals, quarterly or biannual laboratory testing, and the compounding indirect costs of reduced productivity, fatigue-related lost working hours, and the psychological burden of chronic condition management. Over a year, this expenditure routinely ranges from ₹50,000 to ₹2,00,000 — and it yields management of the condition, not recovery from it.

Against this reference point, GRASA's pricing is entirely reframed. A six-month Complete Reset program at ₹42,000 — which includes fermented millet products delivered fresh, a consultation with a qualified dietitian, regular follow-up, and monthly biomarker tracking — is not a luxury expenditure. It is a recovery investment whose cost is lower than one year of chronic disease management, and whose intended return is the elimination or significant reduction of that annual expenditure going forward.

Health Expenditure as Investment — A Logical Framework

GRASA's founders articulated a pricing philosophy grounded in an economic logic that extends beyond prospect theory into the fundamental structure of risk management and investment return. Consider the economic logic of health insurance. An individual pays an annual premium — a certain, present expenditure — to hedge against the uncertain future cost of illness. The premium is not evaluated against the cost of groceries or entertainment. It

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is evaluated against the potential financial devastation of an uninsured health event. The rationality of the premium depends entirely on the reference point: what is the cost of not having it?

GRASA's pricing operates on an identical logical structure. The expenditure on a metabolic recovery program is a present, certain investment made to mitigate the future, uncertain — but statistically probable — cost of unmanaged metabolic disease. The return on this investment is not measured in rupees. It is measured in what economists term quality-adjusted life years — the days, months, and years of functional, energetic, metabolically stable life that chronic disease management consumes and metabolic recovery restores. If a six-month GRASA The program reduces a patient's HbA1c from diabetic to pre-diabetic range, eliminates daily medication dependence, and restores sustained energy — the return on the ₹42,000 investment is not a product. It is time. It is a lifespan. It is the compounding value of years lived without the physical, cognitive, and economic burden of chronic metabolic dysfunction.

This reframing — health expenditure as a premium paid to mitigate metabolic risk, with a return on investment in longevity — is not a marketing narrative. It is a logically coherent economic argument that prospect theory explains and that GRASA's customer consultations support. Patients whose reference point was correctly anchored — total disease management cost versus total recovery investment — found GRASA's pricing not merely acceptable but rational. The objections came consistently from observers whose reference point remained the health food shelf, not the patient's lived economic reality of chronic illness.

Pricing as Category Signal

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There is a second function of GRASA's pricing that category creation theory illuminates. Price is not merely a revenue mechanism. In a new category — where no prior product exists to establish consumer expectations — price is a signal of category identity. A GRASA program priced at ₹500 per month would communicate that GRASA is a health food product. A program priced at ₹21,000 to ₹42,000 communicates something categorically different: that GRASA is a clinical recovery system, comparable in its seriousness and its economic logic to medical treatment, not to grocery shopping.

This is the pricing decision that a category creator must make and hold under significant social and commercial pressure. GRASA set its pricing — not out of inflexibility, but because it understood the price did not reflect the product's cost. It was describing the category's identity and its economic logic. To lower the price would not have made GRASA more accessible. It would have made GRASA indistinguishable — another health food product on a shelf already crowded with products that do not deliver metabolic recovery.

The appropriate framework is as follows: GRASA's program price represents a premium paid to mitigate metabolic risk, with the return on investment measured in longevity—days, months, and years of functional, energetic, and metabolically stable life restored. Interactions with founders and patient consultations across Delhi NCR and Chandigarh consistently indicated that recovery, rather than price, was the primary decision criterion for patients considering GRASA's program. When the reference point is correctly established—comparing total disease management cost to total recovery investment—pricing is not a barrier but a signal. It is not a snack or a supplement, but a metabolic recovery investment whose dividend is time.

Section 4.5 — Brand as Category Ownership

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Category creation theory holds that the founder who names a category owns it (Lochhead & Maney, 2019). The name is not a description of the product. It is a claim on the problem space — a linguistic act that establishes the category's boundaries, defines what belongs inside them, and implicitly positions every alternative solution outside them.

The act of category naming in GRASA's case begins with the brand name itself. GRASA carries deliberate etymological weight across two linguistic traditions. In Spanish, *grasa* means fat — the nutritional macronutrient that modern dietary culture has systematically demonised and that metabolic science has progressively rehabilitated as essential to hormonal function, cellular repair, and sustained energy metabolism. In Sanskrit, *grasa* means a morsel — a single bite of food, the most fundamental unit of daily nourishment. The founders synthesised these two meanings into a single founding intention: *a bite of prosperity*. Not abundance in the excess sense. Prosperity in the restoration sense — the return of biological function, energy, and longevity through the most ordinary and most powerful human act: eating.

This etymological dual meaning is not incidental. It encodes GRASA's entire philosophy into its name before a single word of category language is spoken. Fat is not the enemy — it is nutrition. The morsel is not insignificant — it is the unit of recovery. Every bite, every day, consistently, is the mechanism through which metabolic restoration becomes possible. The brand name is the thesis. The category phrase is its elaboration.

GRASA's category name — *India's first food-led metabolic recovery system* — was not arrived at through branding exercises or marketing consultation. It was constructed word by word from first principles, each term chosen to claim a specific dimension of the category that no prior product or service had occupied.

Deconstructing the Category Name

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“India’s” — The geographic qualifier is simultaneously a market claim and a scientific one. India is the world’s largest producer of millets, accounting for over forty percent of global millet output (FAO, 2023)⁹. India possesses a centuries-old tradition of fermentation science, a world-class base of medical professionals, and a dietitian community with deep expertise in managing metabolic disease through nutrition. The word “India’s” does not limit the category geographically. It roots it in a specific scientific, agricultural, and medical heritage that gives GRASA’s methodology its legitimacy — and that no foreign competitor can authentically claim. It is a declaration that the solution to India’s metabolic health crisis exists within India’s own knowledge systems, food science, and clinical expertise.

“Food-led” — This is the most precise and most consequential word in the phrase. Not medicine-led. Not supplement-led. Not diet-led. Food-led. The qualifier establishes that the primary intervention mechanism is the daily food a person consumes — not a pill taken alongside food, not a powder mixed into food, not a regime that replaces food with something foreign. Food that is consumed every day, consistently, over time. The word “led” carries additional weight: it positions food not as a supporting element in a treatment protocol but as the primary driver of metabolic recovery. This directly inverts the conventional hierarchy of India’s healthcare system — in which food is the afterthought and medication is the intervention — and replaces it with a framework in which food is the intervention and medication is the complement.

“Metabolic” — The choice of metabolic over more specific clinical terms — diabetic, hormonal, digestive — is a deliberate act of category breadth. Metabolism is the body’s fundamental energy conversion system. It does not operate in isolated organs. It operates as a unified biological process across every cell, tissue, and system simultaneously.

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By naming the category metabolic rather than diabetes-specific or PCOS-specific, GRASA claims a scope that encompasses the full range of conditions arising from metabolic dysfunction — insulin resistance, hormonal imbalance, gut dysregulation, chronic inflammation, weight dysregulation — without being defined or limited by any single diagnosis. It is a claim on cellular recovery — the body is addressed as one integrated unit rather than a collection of separately managed conditions.

“Recovery” — This word is the most philosophically loaded in the phrase and the most carefully chosen. Recovery is not relief. Relief is temporary — it describes the suppression of a symptom while its cause persists. Recovery is structural, intentional, and sustained — it describes the restoration of the biological conditions that allow the body to function without ongoing intervention. The word carries a further implication deliberately embedded by GRASA's founders: recovery is reversible only through abandoning its conditions. A patient who achieves metabolic recovery through GRASA's program and subsequently returns to the dietary patterns that caused their dysfunction will experience recurrence — not because GRASA failed, but because recovery requires consistency as its operating condition. This is not a limitation of the product. It is the honest biological reality of any genuine recovery — and stating it explicitly distinguishes GRASA from interventions that promise permanent results from temporary compliance.

“System” — The final word is perhaps the most architecturally significant. GRASA is not a product. It is not a service. It is a system — an integrated structure in which three distinct components operate in coordination to produce an outcome that none of them could produce independently. The first component is science: the biological relationship between fermented millet, the human gut, and metabolic function — food entering the body, strengthening metabolism, which in turn determines how subsequent food is processed. The

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second component is expertise: the dietitian who personalises the nutritional intervention and the physician who provides clinical oversight and biomarker accountability. The third component is technology: the digital infrastructure — application, website, remote consultation, and follow-up protocols — that makes the system accessible, consistent, and scalable beyond the geographic constraints of a single clinic or kitchen. Science, expertise, and technology — not in sequence but simultaneously, at one place, for one patient, toward one outcome.

The Strategic Function of the Name

Category creation theory identifies brand language as the mechanism by which a founder establishes their category's frame of reference as the default for everyone who encounters it (Lochhead & Maney, 2019). When a physician describes GRASA to a patient, they use GRASA's language. When a patient refers a family member, they use GRASA's language. When a competitor enters the therapeutic food space — and they will — they will be evaluated against GRASA's language, because GRASA named the category first.

This linguistic ownership is reinforced by what the name excludes as much as by what it claims. A product described as a millet snack is evaluated against other millet snacks. A product described as a probiotic supplement is evaluated against other probiotic supplements. A product described as India's first food-led metabolic recovery system is evaluated against — nothing. Because nothing else existed in that category before GRASA created it, the name does not position GRASA within an existing market. It establishes the market within which GRASA is the only logical participant.

India has long recognized that food and medicine are inseparable — that what a person eats every day determines, more than any other single variable, the biological conditions in which they age. The gap was never in the knowledge. It was in the system that

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could translate that knowledge into a consistent, expert-guided, technologically supported daily practice accessible to an urban Indian family managing metabolic disease. GRASA named that system. In naming it, GRASA claimed it.

GRASA's category creation has received independent national recognition through the Rashtriya Ratna Samman 2026, awarded as the Emerging HealthTech and Nutrition Innovation Startup of the Year—an acknowledgement that the category GRASA created has achieved visibility and credibility beyond the startup ecosystem in which it was incubated.

Section 5 — Discussion

This section interprets the case findings through the theoretical frameworks established in the literature review, articulating their implications for category creation, behavioural economics, and entrepreneurial strategy in regulated consumer markets. By situating GRASA's case within broader scholarly conversations, the discussion advances understanding of the mechanisms by which new therapeutic food categories are established and defended in complex, highly regulated environments. Each finding from the case analysis is examined in turn to elucidate its theoretical and practical significance.

The case of GRASA offers three findings that extend beyond the particulars of one startup's founding journey and contribute to broader scholarly conversations in entrepreneurship, behavioural economics, and innovation systems research. This section discusses each finding in turn, connecting empirical observations of GRASA's category-creation process to the theoretical frameworks established in the literature review.

Finding 1 — Category Creation in Regulated Markets Requires Simultaneous Behaviour Change in Two Distinct Audiences

Existing literature on category creation has predominantly developed in the context of technology markets — software platforms, digital ecosystems, and hardware systems —

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where the primary audience for behaviour change is the end consumer (Lochhead & Maney, 2019; Parker, Van Alstyne & Choudary, 2016). GRASA's case reveals that category creation in regulated consumer health markets introduces structural complexity absent from technology category creation: the founder must simultaneously change behaviour across two distinct, institutionally separate audiences whose decision-making frameworks, risk tolerances, and information environments are fundamentally different.

The first audience is the consumer — the metabolically compromised urban Indian patient whose behaviour change is required not at the point of purchase but at the point of daily food consumption. GRASA's product architecture addressed this by eliminating the behaviour change demand: by designing fermented millet products in formats — flour, bread, cookies — already embedded in the daily food routine of the North Indian household, GRASA removed the compliance barrier that defeats every dietary intervention requiring the adoption of unfamiliar foods or preparation methods. The category was designed to be behaviourally invisible to the consumer. Recovery happens through replacing what they already eat, not by adding something foreign.

The second audience is the medical professional — the physician whose referral behaviour determines whether GRASA reaches the patient in the first place. Changing physician referral behaviour requires a different mechanism entirely: not product design but clinical evidence. Physicians refer to what they trust. Trust is built through observed patient outcomes — biomarker improvements that the physician can read, evaluate, and discuss with the patient in a subsequent consultation. GRASA's closed-loop referral architecture — in which monthly biomarker data is reported simultaneously to the patient and the referring physician — was designed specifically to generate the clinical feedback that converts a single referral into a sustained referral relationship.

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This dual behaviour change requirement — consumer compliance through product invisibility, physician adoption through clinical evidence — represents a category creation challenge structurally distinct from anything documented in the existing technology-focused literature. It suggests that the creation of therapeutic food categories constitutes a research domain requiring its own theoretical framework, one that integrates consumer behaviour economics with clinical adoption theory in ways neither field has yet attempted together.

Finding 2 — Prospect Theory Explains Premium Pricing in Therapeutic Food Markets More Accurately Than Conventional Pricing Models

GRASA's pricing journey — from an unsustainable ₹6,000 trial pack to a clinically justified program architecture priced at ₹21,000 to ₹42,000 — demonstrates that the standard pricing frameworks applied to FMCG products are categorically inappropriate for therapeutic food systems. Cost-plus pricing fails because it anchors price to production economics rather than to the value delivered. Competitive pricing fails because no comparable competitor exists against whom GRASA can position its price. Willingness-to-pay research fails because it asks consumers to evaluate a product within an existing category frame — and GRASA exists outside all such frames.

Prospect theory provides the analytically correct framework because it correctly identifies that pricing decisions are evaluated not in complete terms but relative to a reference point — and that the founder's primary pricing task is not to set a number but to establish the correct reference point in the customer's mind (Kahneman & Tversky, 1979). GRASA's pricing is rational — not despite being thirty to one hundred times more expensive than a millet snack, but because it is evaluated against the correct reference point: the total annual expenditure of unmanaged metabolic disease, which for a typical urban middle-class Indian

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household ranges from ₹50,000 to ₹2,00,000 and produces management of symptoms rather than recovery from their cause.

The investment framing that GRASA's founders articulated — health expenditure as a premium paid to mitigate metabolic risk, whose return on investment is measured in restored functional lifespan — extends prospect theory into a domain that Kahneman and Tversky's original framework did not address: the valuation of health outcomes in non-monetary terms. When the return on an investment is measured not in rupees but in days of energetic, metabolically stable life restored, the conventional tools of financial analysis become insufficient. What emerges is a health investment framework in which the premium is the program cost, the risk mitigated is chronic metabolic dysfunction, and the dividend is longevity. This framework, grounded in prospect theory but extending it into therapeutic consumer markets, represents a contribution to behavioural economics literature that merits further empirical investigation across other therapeutic health categories.

Finding 3 — Causal Gap Identification Combined With Effectual Solution Building

Sarasvathy's (2001) distinction between causal and effectual entrepreneurial reasoning is frequently presented in entrepreneurship literature as a binary — founders either reason from goals backward to means, or from means outward to emergent goals. GRASA's founding process suggests that this binary may be insufficient to describe category creation in regulated therapeutic markets, where the gap is identifiable through causal market analysis. However, the path to filling it cannot be determined causally because no prior solution exists to model.

GRASA's market research established the gap through recognisably causal logic. Systematic analysis of India's health intervention landscape revealed two occupied positions — FMCG health food and pharmaceutical intervention — and one structural absence: a food-led

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metabolic recovery system that addressed daily nutrition as the primary therapeutic mechanism. The gap was not discovered accidentally or through lived experience alone. It was deliberately identified through the kind of structured market analysis that causal entrepreneurial reasoning produces. In this respect, GRASA's founding is consistent with the causal framework: a goal — to fill the therapeutic food gap — was identified before the means were assembled.

However, translating this identified gap into an actual product system could not follow causal logic, because causal reasoning requires a template—a prior solution whose components can be reverse-engineered toward a new goal. No such template existed. There was no prior food-led metabolic recovery system in India whose architecture GRASA could study, adapt, or improve upon. The category had not been created. Its components — controlled fermentation methodology, indigenous millet selection, dietitian-led personalisation, physician referral integration, digital follow-up infrastructure — had to be assembled from first principles, each element evaluated not against a predetermined blueprint but against the practical question of what was available, what was biologically sound, and what an urban Indian household could actually integrate into daily life without behaviour change.

This assembly process exhibits the hallmarks of effectual reasoning — working from available means outward toward an emergent system architecture — even though a causally identified goal initiated it. The founding logic of GRASA, therefore, does not conform neatly to either pole of Sarasvathy's framework. It suggests a third mode of entrepreneurial reasoning.

relevant to category creation in regulated markets: **causal identification of the gap, effectual construction of the solution.** The goal is set causally. The path is built effectively. This

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hybrid reasoning mode — to our knowledge undocumented in the existing entrepreneurship literature — may represent the characteristic cognitive pattern of founders creating genuinely new categories in markets where no prior solution exists to model, adapt, or disrupt.

This finding has direct implications for incubation and acceleration program design — particularly relevant given GRASA's position as a portfolio startup within COSMINNOX's founder operating system. Standard incubation methodology, grounded in causal reasoning frameworks, equips founders to identify gaps and reverse-engineer solutions from existing templates. For category creators operating in genuinely uncharted territory — where the gap is visible but the solution has no precedent — effectual reasoning tools are additionally required. COSMINNOX's mentorship framework, which works with founders across both market opportunity identification and the development of novel solutions, is therefore better positioned than standard accelerator programs to support this class of startup.

Section 6 — Conclusion

This paper set out to examine a single research question: how did GRASA create and defend a new market category in India's functional food market, and what do behavioural economics and category creation theory explain about that process? The case analysis across five dimensions — white space identification, proprietary technology, network effects, pricing architecture, and brand language — produces three findings that collectively advance scholarly understanding of category creation in regulated therapeutic consumer markets.

What This Paper Found

GRASA's category creation was not the result of a single decision or a single insight. It was the cumulative result of five interdependent strategic choices, each addressing a different structural barrier to category establishment.

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The white space was identified through systematic market research that revealed a structural absence between India's FMCG health food sector and its pharmaceutical intervention system — a gap that neither occupied nor was designed to fill. No food-led metabolic recovery category existed in India. GRASA created it.

The category was anchored by a proprietary controlled fermentation methodology — drawing on the classical Indian science of Sandhana Kalpana and scaling it through contemporary allopathic clinical food science — that produces consistent, measurable therapeutic outcomes across every production batch. This process cannot be replicated solely through ingredient substitution or marketing repositioning. It is a technology moat built over three years of empirical refinement across 500+ program participants.

The category was built through a two-sided clinical referral network in which physician and patient referrals reinforce each other, with each successful outcome generating clinical evidence that strengthens the physician's referral confidence and peer advocacy. extends the patient network. This network becomes more valuable and more credible with each cycle of referral and recovery. It is a moat built from trust — clinical and relational — that price competition alone cannot disrupt.

The category was priced as a health investment rather than a food product — anchored by prospect theory's insight that reference points determine perceived value. Against the correct reference point — total annual expenditure of unmanaged metabolic disease — GRASA's program pricing is not a premium. It is a rational investment whose return is measured not in rupees but in restored functional lifespan. The premium is the program cost. The dividend is longevity.

The category was named with deliberate linguistic precision. GRASA — from the Sanskrit morsel and the Spanish nutritional fat, synthesised as a bite full of prosperity — and

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its category phrase, India's first food-led metabolic recovery system, together constitute an act of linguistic ownership that establishes the frame within which every subsequent market entrant will be evaluated. The name is the thesis. The category phrase is its elaboration. Together, they claim a problem space that no prior product had named—and by naming it, GRASA owns it.

What This Paper Contributes

Three theoretical contributions emerge from this analysis.

First, category creation in regulated therapeutic consumer markets requires simultaneous behaviour change in two institutionally separate audiences — the end consumer and the medical professional — through fundamentally different mechanisms. Consumer compliance is achieved through product invisibility: food that fits seamlessly into existing daily routines rather than demanding the adoption of something foreign. Physician adoption is achieved through clinical evidence: biomarker data that closes the feedback loop between dietary intervention and measurable patient outcome. This dual behaviour change requirement is absent from the existing technology-focused category-creation literature and constitutes a distinctive challenge that merits its own theoretical framework.

Second, prospect theory explains pricing decisions in therapeutic food markets more accurately than any conventional pricing model — and GRASA's case extends Kahneman and Tversky's framework into a domain their original work did not address: the valuation of health outcomes in non-monetary terms. When the return on investment is measured in restored functional lifespan rather than financial return, a health investment framework emerges — premium paid against metabolic risk, dividend received as longevity — that has implications for how therapeutic health startups across multiple categories should think about, communicate, and defend their pricing architecture.

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Third, GRASA's founding logic suggests a hybrid entrepreneurial reasoning mode — causal identification of the market gap combined with effectual construction of the solution — that conforms to neither pole of Sarasvathy's causal-effectual framework. When a category gap is visible but no prior solution exists to model, adapt, or disrupt, founders cannot reason causally. Toward a solution, because there is no template to reverse-engineer. They must reason effectively — assembling available means toward an emergent system architecture — even though their initiating goal was causally identified. This hybrid reasoning mode, to our knowledge undocumented in the existing entrepreneurship literature, may represent the characteristic cognitive pattern of genuine category creators operating in uncharted market territory.

Limitations and Future Research

This paper employs a single case study methodology — appropriate for exploratory theory-building in a domain where no prior research framework exists. As with all case study research, the findings are not statistically generalisable across the population of Indian FoodTech startups. They are, however, theoretically generalisable: the dual behaviour change framework, the health investment pricing model, and the causal-effectual hybrid reasoning mode identified here provide testable propositions for future empirical investigation across multiple cases. This is the appropriate epistemic position for research that, by design, opens a new conversation rather than closes an existing one.

Additionally, GRASA's category creation journey is ongoing. This paper documents the founding and early growth phase of a startup that, at the time of writing, has served 500+ program participants across Delhi NCR and Chandigarh. Whether the four structural characteristics of category defence — proprietary technology, network effects, economies of scale, and branding — prove sufficient to resist competitive entry as the therapeutic food

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category attracts larger incumbents is a question that longitudinal research will need to address.

Future research directions suggested by this paper include: a comparative case study of category creation across multiple therapeutic food startups in India's metabolic health market; a longitudinal study of GRASA's category defence as the market matures; empirical testing of the causal-effectual hybrid reasoning framework across a larger sample of category-creating founders in regulated consumer markets; and quantitative investigation of the health investment framework — premium, risk, and longevity dividend — as a pricing communication model in therapeutic health categories beyond food.

India has a metabolic health crisis. India has food science. India has the clinical expertise. India has the indigenous grain systems whose therapeutic capacity modern food processing has abandoned, and that controlled fermentation can restore. What India lacked was a system that brought these elements together — consistently, expertly, daily — in a form that an urban Indian family could actually live with. GRASA built that system. In doing so, it did not enter a market. It created one.

GRASA is not a snack, not a medicine, and not a magical solution. It is real food designed to support the body's health, delivering measurable benefits through consistent daily consumption.

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