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INDIAN DIETARY SUPPLEMENT MARKET: ISSUES, PERSPECTIVE & WAY FORWARD

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Abstract:

The Indian dietary supplement market has witnessed remarkable growth in recent years, driven by changing lifestyles, rising health awareness, and the pursuit of holistic well-being. This research paper delves into the complexities, challenges, and opportunities that characterize the Indian dietary supplement landscape.

The paper explores the prevailing issues, including regulatory concerns, quality control, and the need for consumer education. It provides an in-depth analysis of the market's perspective, emphasizing the significance of traditional medicine systems like Ayurveda and the growing inclination towards nutraceuticals.

Furthermore, this research presents a comprehensive assessment of the way forward for the Indian dietary supplement market. It offers insights into potential strategies for addressing the current issues, harnessing the nation's rich herbal heritage, and capitalizing on the market's dynamic growth potential.

In summary, this paper aims to provide a holistic view of the Indian dietary supplement market, serving as a valuable resource for industry stakeholders, policymakers, and researchers seeking to understand the challenges and possibilities within this rapidly evolving sector.

INTRODUCTION

Food supplements, also known as nutritional supplements, provide essential nutrients that the body may not receive in adequate amounts through regular diet. These nutrients can encompass vitamins, minerals, or other substances and are typically administered in the form of pills, tablets, capsules, or liquids.

Dietary supplements consist of concentrated essential nutrients derived from natural food sources or created synthetically. Their primary purpose is to meet the body's nutritional needs

and are usually ingested in pill, capsule, tablet, or liquid form. Supplements can deliver nutrients individually or in combinations, depending on the individual's specific requirements. They are rich in vitamins, minerals, herbs, enzymes, amino acids, and various other elements. The primary objective of supplement consumption is to bridge nutritional gaps in the body, thereby aiding in disease prevention and addressing lifestyle-related issues.

The global market for vitamins and minerals is anticipated to reach USD 20.7 billion in 2021, while the Indian market is projected to reach USD 178 million. The Indian market for vitamins, minerals, and supplements (VMS) is expected to grow at an annual rate of 4.48% from 2021 to 2025.

UNDERSTANDING FOOD SUPPLEMENTS

Food supplements, also referred to as dietary or nutritional supplements, are designed to provide nutrients that may be lacking in sufficient quantities from one's regular diet. These supplements can encompass vitamins, minerals, amino acids, fatty acids, and various other substances, typically delivered in the form of pills, tablets, capsules, liquids, and more. Supplements are available in various doses and combinations. However, it's essential to note that our bodies require specific amounts of each nutrient to function optimally, and excessive amounts can sometimes have adverse effects and become harmful. To safeguard consumer health, supplements are legally sold with recommended daily doses and warnings not to exceed those doses.

CLASSIFICATION OF FOODS & SUPPLIMENTS

Functional Foods

These are food products that offer specific physiological benefits and have the potential to reduce the risk of chronic diseases. Examples include nutritionally fortified foods like fortified flour, fortified oil, fortified malt-based powder, and probiotic items such as yogurt.

Dietary Supplements

These are products designed to provide essential nutrients that may be lacking or insufficient in an individual's regular diet. They encompass vitamin supplements, mineral supplements, macronutrients, antioxidants, tonics, and herbal formulations like Chyawanprash, Musli pak, Ashwagandhadi leh, as well as non-herbal products like cod liver oil.

Functional Beverages

These are liquid products that not only quench thirst but also replenish minerals, offer energy, prevent ailments, and promote a healthy lifestyle. Examples include sports and energy drinks, fortified juices, and glucose drinks and powders.

Products within a category can be classified into specific need-segments based on their primary use. The segments catering to foundational and condition-specific needs are the largest and are experiencing the most rapid growth. Nutraceutical products aim to address particular requirements of individuals and can be categorized as follows:

Enhancement Segments

Encompassing high protein supplements, energy drinks, sports drinks, glucose drinks, and similar products.

Specific condition segments

Including antioxidants, vitamin supplements, and mineral supplements.

Foundation segments

covering macronutrient supplements, nutritionally fortified foods (e.g., fortified flour, soups, biscuits), probiotic foods (like yogurt), and herbal formulations (such as chyawanprash and Ashwagandhadi leh).

COMMON TYPES OF DIETARY SUPPLEMENTS AND THEIR USES

Now, let's explore some common types of nutritional supplements and their purposes:

Vitamins and Minerals: These supplements provide essential vitamins (e.g., vitamin C, vitamin D, vitamin B12) and minerals (such as calcium, iron, zinc) necessary for various bodily functions, including immune support, bone health, and energy production.

Herbal Supplements: These products are derived from plants and often contain extracts or compounds believed to offer health benefits. Examples include ginkgo biloba extracts for cognitive support and echinacea for immune support.

Amino Acid Supplements: Amino acids are the building blocks of proteins. Supplements like branched-chain amino acids (BCAAs) are utilized by athletes to support muscle recovery and growth.

OVERVIEW OF THE MARKET

In India, dietary supplements (VMS) are typically viewed as medicinal products, with consumers generally relying on doctor-prescribed recommendations for their usage. About 37% of the population use these supplements, while 23% of urban residents seek expert advice when deciding which supplements to incorporate into their regimen.

Due to the increasing demands of longer working hours, individuals in India find themselves with limited time for preparing nutritious meals, leading to widespread nutritional deficiencies across the country. Furthermore, many consumers lack awareness of how to address these deficiencies, highlighting the need for educational efforts regarding the advantages of VMS products.

In North India, 38% of the population embrace food supplements to enhance the health and appearance of their hair, nails, and skin, as they have become more cognizant of the associated benefits.

The market is divided into various segments, with single vitamins constituting 27% of the market. The use of vitamin D has seen growth, particularly among those with busy, indoor-oriented lifestyles, resulting in decreased sun exposure. Vitamin D deficiency can lead to fatigue and weakened bone health, ultimately raising the risk of osteoporosis. B12 deficiency is also prevalent, affecting 47% of the North Indian population. Vitamin B12 is crucial for neuronal function, metabolism, and hormone regulation. Some consumers have reported feeling more energetic and improved overall well-being when using both vitamin D and B supplements together. Additionally, vitamin C is gaining popularity for preventing colds and flu, as well as its immune-boosting properties.

Multivitamins account for 22% of the Indian VMS market, with consumers favoring the all-in-one format they offer. Approximately 98% of multivitamins on the market include a combination of various vitamins, minerals, and plant/herb extracts.

MINERALS

Minerals constitute 38% of the market, with the top three minerals being calcium, iron, and zinc. Calcium is particularly valuable for bone health, especially in women with reduced bone density due to declining estrogen during menopause. It also plays a vital role in maintaining overall bone strength and reducing the risk of osteoporosis among the elderly.

The popularity of iron is on the rise in India, primarily because 51% of women aged 15 to 49 suffer from anemia. This deficiency can be attributed to various factors like menstruation, inadequate dietary intake, low iron levels, and malnutrition. With larger product sizes and more affordable pricing, iron consumption is increasing.

Zinc deficiency can compromise immune function, and there is a higher demand for zinc in urban areas of India, emphasizing the need for education in rural regions.

THE CONSUMER

According to Mintel, VMS products are consumed by 37% of the Indian population, with 58% of them being female. More than half of these consumers started using VMS products based on their doctor's recommendations. Another significant factor driving VMS consumption is word-of-mouth recommendations, with 26% of users adopting vitamins based on suggestions from friends and family.

Nonetheless, two primary factors hinder Indian consumers from adopting VMS products: concerns about potential side effects and a belief that their current diet is already nutritious enough.

BROADENING THE SCOPE OF COMPLEMENTARY AND ALTERNATIVE (CAM) APPROACHES

In many developing countries, over 80% of the population faces financial barriers that prevent them from accessing even the most fundamental medical treatments, medications, and vaccines. Within more affluent segments of society, both in developed and developing nations, there is a growing interest in complementary and alternative practices, despite the limited evidence supporting their safety and efficacy.

In India and internationally, there is an increasing acceptance of evidence-based research in Ayurveda [traditional Indian medicine]. The United States Federal Government has inaugurated the National Center for Complementary and Alternative Medicine as its primary agency for conducting scientific research in this field of medicine. The center's mission is to rigorously investigate complementary and alternative healing practices, support advanced research endeavors, train researchers, share information with the public regarding effective modalities, and elucidate the scientific foundation for these discoveries. The center is committed to exploring and providing funding for any such therapies that are supported by sufficient preliminary data, address pressing public health needs, and adhere to ethical principles.

NUTRACEUTICALS AS AN EVOLVING ALTERNATIVE APPROACH

Nutrition stands as a fundamental necessity, and health-related risks often stem from nutritional imbalances. In India, such imbalances are widespread and give rise to adverse

health outcomes. A significant portion of the population consumes diets that lack not only adequate calories but also essential nutrients. In India, approximately 20% of the total population, and as much as 44% of young children (under 5 years old), suffer from undernourishment and low body weight. Conversely, there exists a substantial segment of the population with sufficient calorie intake but an insufficiency in terms of nutrient intake. This segment typically comprises individuals from the lower-middle to upper-class strata, who may possess the financial means to support their diet but lack awareness of their specific nutritional needs, leading to imbalanced nutrient consumption.

Remarkably, in our population, around 30% of urban and 34% of rural residents consume more calories than recommended, along with higher levels of dietary fats, potentially setting the stage for India to become a global epicenter for cardiovascular and diabetes-related health issues. There is also a third population segment, numbering approximately 80 million, which takes in nutrients and calories in excess of what is advised for their chosen lifestyle. Nutritional factors represent the main risk contributors in developing countries like India, accounting for nearly 40% of total deaths and 39% of the overall disease burden. These nutritional factors are the primary culprits in the context of developing countries.

EXPANDING COMPLEMENTARY AND ALTERNATIVE (CAM) APPROACHES

According to a report from the World Health Organization (WHO), India bears the greatest burden of cardiovascular diseases and has the largest number of diabetes patients worldwide. The numbers of cardiovascular disease patients in Brazil, Russia, China, and India are 4.1 million, 11.8 million, 24.5 million, and 28.9 million, respectively. Similarly, the number of diabetes patients in these countries is 4.6 million, 4.6 million, 20.8 million, and 31.7 million, respectively. The estimated cost of productivity lost due to mortality from nutrition-related disorders was 0.85% of the GDP in 2004 and is projected to rise to 1.2% of India's GDP by 2015.

A significant percentage of people in both urban (30%) and rural (34%) areas consume calories in excess of recommended levels. Even among those with sufficient calorie intake, micronutrient consumption remains inadequate. While calorie-rich foods are consumed in abundance, foods rich in essential micronutrients are not. This results in substantial micronutrient deficiencies in both urban and rural areas.

Therefore, there is a growing need for external intervention to supplement diets, prevent nutrition-related disorders, and promote overall well-being. These products, known as nutraceuticals, play a crucial role. A nutraceutical is essentially a food or food component that claims to offer health benefits, including the treatment and prevention of diseases. Nutraceuticals can be categorized as products derived from natural sources or manufactured synthetically, providing additional nutrition beyond regular food and helping to prevent

nutrition-related disorders. They go beyond mere dietary supplementation; they aid in the prevention and treatment of diseases. The appeal of nutraceuticals lies in their potential to achieve treatment objectives without undesirable side effects.

The nutraceutical industry is experiencing rapid growth (7%–12% annually). With promising anecdotal evidence of health benefits, nutraceuticals offer significant potential in disease prevention. Globally, the nutraceuticals market is estimated at 117 billion USD, with India's share being a mere 0.9%. The United States and Japan are significant markets for nutraceutical consumption. India's nutraceutical market is currently valued at about 1 billion USD and continues to expand. Worldwide, this market is projected to reach 177 billion USD by 2013, with dietary supplements expected to be the fastest-growing product category.

HERBAL MEDICINES IN DIETARY SUPPLEMENTS

Dietary supplements and herbal remedies have gained popularity as complementary or alternative products for individuals. These supplements are designed to augment dietary intake and contain one or more dietary components, including vitamins, minerals, herbs, amino acids, and other substances or their constituents. They are intended for oral consumption in the form of pills, capsules, tablets, or liquids and are labeled as dietary supplements. These products can encompass a wide range, from isolated nutrients and dietary supplements to genetically engineered "designer" foods, herbal products, and processed foods such as cereals, soups, and beverages. Botanicals are available in various forms, including fresh or dried products, liquid or solid extracts, tablets, capsules, powders, and tea bags. For instance, fresh ginger root is often found in different food stores, while dried ginger root is packaged in tea bags, capsules, or tablets. Liquid preparations made from ginger root are also available in the market. In some cases, a particular group of chemicals or a single chemical may be isolated from a botanical and sold as a dietary supplement, typically in tablet or capsule form. Phytoestrogens from soy products serve as an example.

NUTRACEUTICAL CONCEPT WITH VARYING DEFINITIONS

The nomenclature for nutraceuticals is dependent on the specific segments they encompass. In Canada, they are termed "natural health products," while the United States uses "dietary supplements," and Japan refers to them as "foods for special health use." Different definitions and regulations exist for dietary supplements and functional foods in the USA, Canada, and Europe, with Japan regulating both under the same set of rules. The United States and Canada provide explicit lists of constituents necessary for a product to be considered a nutraceutical, while Europe and Japan offer more general guidelines on the properties that a product should possess to earn the nutraceutical classification. Canada includes traditional and herbal medicines in the definition of dietary or nutritional supplements, whereas Japan does not mention traditional herbal medicines under functional foods for special health use. The United States includes herbal and botanical ingredients in its definition. In India, the definition lists the ingredients a product should contain and specifies general properties of

nutraceuticals, with traditional medicines excluded from the definition. Three categories have been considered within the scope of nutraceuticals.

THE PATH FURTHER

In India, supplements are primarily seen as remedies rather than preventive measures. The industry could target the elderly by educating them about how these products can enhance their quality of life. This approach may also resonate with individuals under the age of 25, as they indicated a greater willingness to take vitamins when advised by a parent or elder family member.

Consumer interest is notably high in products containing vitamins C, D, and E, with claims of immunity-boosting effects. Sales of these vitamins with such claims are expected to increase.

CONCLUSION

As an increasing number of individuals embrace VMS (Vitamins and Mineral Supplements) and gain awareness of their advantages, we anticipate that the Indian market for VMS products will continue to expand.

In the past, vitamins and supplements were primarily utilized by athletes and fitness enthusiasts to enhance their athletic performance. However, there is now a noticeable shift in the market, with a growing number of consumers turning to these products for the purpose of safeguarding and preventing illnesses. The VMS market in India is expected to remain responsive until consumers acquire a more comprehensive understanding of the benefits of dietary supplements. At that point, the market is likely to transition from a responsive one to a proactive one, as consumers take a proactive approach to maintaining their health.

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