

## Energy Boosters: The Craze Continues

Everyone feels a need for added boost of energy at work, home, school, sports or even weekend outings. As per one survey, 75% of consumers are concerned about energy and vitality. Their concerns are related to specific fatigue issues for some, while others simply seek products giving them stamina to fulfil their daily responsibilities. This is consistent across all age groups. Consumers use various sources to prevent lack of energy, including supplements (59%), food (51%) and beverages (30%).

Irrespective of the form of energy boosters, one must realise that the only way to obtain energy is through mitochondria of cells in the body. Every cell needs oxygen that enables mitochondria to produce energy through biochemical reaction that converts food into energy. Being central to energy production, mitochondria are fully integrated into the cell's physiological responses to aging. The age-related decline of capacity of each cell to manufacture energy (as ATP) is due to the progressive loss of structural integrity of mitochondria. With aging, cells become less able to maintain adequate levels of cellular energy production. Besides Baby Boomers, there are other groups looking to stay active using energy boosters, such as young professionals, athletes and weekend warriors.

### Market Buzz

Most popular are energy drinks. Consumers prefer to consume their energy through beverages looking at the number of new energy beverages either launched or in the process of launching. They are convenient, easy to purchase and well-known beverage companies are marketing them.

One energy drink generating a lot of noise is Cocaine by Redux Beverages. This contains more caffeine than a cup of coffee and is billed as "the legal alternative", being part of marketing strategy. Some retailers are not happy with the name and certain convenience stores refuse to sell it after getting complaints from parents of teens.

One report states that more than one third of US teenagers say they drink energy drinks. That amounts to 7 million teens – an increase of 3 million in 3 years. The problem with them looking for energy boost is that some may consume several cans in a row. Poison centres have recently received an increasing number of calls from young people getting sick from consuming too much caffeine. Consumers must therefore approach these energy drinks with caution as excess may pose problems to the body.

Consumers must remember that there are two distinct types of energy boosters available. There are some products that provide a quick short-term energy boost, but not consistent with good health, especially metabolic health. There are other supplements that provide a more natural type of energy with no sugar spikes or calories involved. This form provides consistent pure energy through ATP, yielding energy throughout the day. From metabolic standpoint, this is more desirable. Market trends show that people seek liquid energy supplement that are unfortunately products providing short-term energy spikes boosting blood sugar for about an hour through large amounts of sugar and caffeine. A bit of taurine and carnitine is added just for label claim.

More marketers are changing their approach to consumers. There is a shift towards the 'sustained energy' and 'energy without crash'. Americans want a pill that lasts all day long or an energy drink lasting all night. Convenience dominates when it comes to preferred delivery methods.

Despite the high sugar craze among teens, reports show that usage of low-sugar foods/ beverages was favoured by 69% of consumers with sugar free close behind at 66%. Low glycemic foods are gaining in energy markets as they have been shown to stabilise blood-sugar levels and provide sustained energy. Usage of low-glycemic foods/beverages showed growth with 42% in 2005 versus 22% in 2004. One-third of consumers also said it is important to have packaged foods with low glycemic index in their stores.

Another interesting trend is interesting new delivery systems like effervescent drink tablets, energy gum, mints and strips etc.

## **Ingredients with 'Oomph'**

Experts recommend energy-enhancing ingredients such as ATP, CoQ10 and nicotinamide adenine dinucleotide (NADH) because they work at cellular levels to help increase energy. ATP is the major energy source of body and is necessary for all body functions. Body depletes it after exercise and also it declines with age. Taking ATP orally helps stimulate circulation promoting an increase in body's natural ATP level. This needs only micromolar amounts of ATP, working at cellular level.

CoQ10 functions as a carrier to transfer electrons across the membrane of mitochondria facilitating ATP production. L-carnitine also helps in increasing cellular energy production, raising the mitochondrial energy-producing capabilities by reversing the age-related decline of mitochondrial enzyme activity. It also plays a vital role in fat metabolism and energy production.

Several botanicals are also being used in energy products. A new product is from Cha' de bugre (10:1 extract), a popular plant in Brazil. It contains caffeine and various plant sterols. Although it has quite low levels of caffeine, it offers a very powerful energy boost without nervous jitters or stomach upset, common with stimulants. Other botanicals used for energy increase are maca and yerba mate, the latter being consumed as a traditional tonic and natural stimulant beverage for centuries.

Ginseng has been used in Chinese medicine for its energy enhancing benefits for last 2000 years. Customers should note some issues like chemical residues associated with it. Certain systemic fungicides are used in ginseng cultivation although not permitted in the US and Europe, raising questions related to safety and purity.

Rhodia rosea and antioxidants are also popular in energy products. Rhodia rosea has been shown to increase brain energy and accelerate recovery after workouts. It also stimulates muscle energy status, glycogen synthesis in muscles and liver and anabolic activity. Antioxidants ingredients like green tea extract, grape seed extract and lycopene, provide a scientifically applied way of getting energy by preventing damage due to free radicals in the body.

## **Stricter Standards?**

Till now relatively unenforced regulatory environment in energy market is changing, with certain groups have asked for crackdown on claims made by energy product manufacturers. Centre for Science in the Public Interest (CSPI) has been aggressively lobbying the FDA to enforce stricter standards for functional foods, their focus seems to be energy drinks. Some alcohol drinkers may reply on energy drinks to 'sober them up' giving false assumption that they can drive. Young drinkers mix them with alcohol for better 'buzz'. Although FDA is not acting but if adverse reports start filtering in, these drinks may come under their scrutiny. DSHEA (Dietary Supplement Health & Education Act) is a good attempt to fulfil industry needs, there is some uncertainty about what is allowed and what is not. Too much liberty allows some to make a quick dollar and escape, causing a lot of harm for the whole industry. Present regulations are not very strict, but some restrictions might come especially on caffeine.

## **A Stimulating Outlook**

Despite some controversy, energy-enhancing products will have strong prospects. As quick fix products lessen in demand, sustainable products will arrive, moving from caffeine to more natural products. Consumers will start demanding healthier energy options, maintaining energy beverage demands hot and popular. Educated population will be interested in botanicals. Marketers will have to communicate more about targeted benefits, active compounds content and proven efficacy. Blends of several botanicals will be developed to satisfy consumer demands. Energy will continue to be dominant category as long as people continue to eat poorly, don't get enough sleep or exercise regularly. Growth rate will be double digit over next couple of years.

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