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REPORT ON COMMERCIALLY AVAILABLE MINERAL RICH FOODS IN DIFFERENT SUPERMARKET OUTLET IN ATTAVAR REGION OF MANGALORE

AIM:

To conduct an on-field survey regarding commercially available mineral-rich food products in supermarket outlets in Attavar region of Mangalore.

OBJECTIVE:

- To gain knowledge on various mineral-rich foods available in the market.
- To study the nutritive composition of mineral-rich foods.
- To know the market trend regarding mineral-rich products.

OUTCOME:

The survey gave a broad spectrum of knowledge on the different varieties of commercially available mineral-rich products with respect to their composition, cost, ingredients, and labeling.

REPORT:

An on-field survey was conducted by the students of 1st MSc FSN on 18th May 2023 at different supermarket outlets located in the Attavar region of Manglore. The supermarkets that were surveyed were *DMart, Apple Mart Hypermarket & Reliance Smart Super Store*. The food products displayed in various counters were studied by going through the nutritional labeling as well as the nutritional claims of the product.

In *DMart* of the Attavar region, it was seen that different brands of breakfast cereals, baby foods, beverages, health drinks & dates with their minimum packaging were rich in minerals. Biscuits like *Britannia marigold* (Iron- 4%) claim to have more than 10 vitamins and minerals in their product. Other biscuits like *Britannia milk bikis* (Calcium-20mg, Iron-0.4mg) and *Bournvita biscuits* (Calcium-90mg) had Calcium and Iron in the product. Health drinks like *Calcium fortified Horlicks* (Calcium-500mg) and *Manna Ragi Malt* (Calcium-45mg, Phosphorus-32mg, Sodium-17mg) showed that they are rich in calcium. Breakfast cereals like *Kellogg's cornflakes* (Iron-12mg, Potassium-60mg), and *kwality muesli* (Iron-23mg, Calcium-80mg, Manganese-14mg.) claim that they are rich in Iron. Baby foods like *Nestlé Cerelac* (sodium-115mg, Potassium-375mg, Calcium-375mg, Phosphorus-225mg, Iron-3.00mg, zinc-2.50mg) and *Ceregrow* (Calcium-500mg, Phosphorus-200mg, magnesium-38mg, Iron-8mg), *Nan pro* (Sodium-99.00mg, Potassium-400 mg, Calcium-270.00mg, Phosphorus-367.90,

Iron-3.00mg, Magnesium-40.00mg, Chloride-250.00mg, Manganese-60.00ug, lodine-95.00.) also claimed to be a good source of iron, calcium and Zinc. Some of the beverages like *Hershey's milkshake* (Calcium-98.5, Zinc-1.2mg) and *Kelvin's milkshake* (Calcium-324mg, Zinc-3.15mg, Phosphorus-144mg) claimed that their product is rich in calcium and Zinc. A few date packages like *Royal Zaidi* (Calcium-64, Iron-0.90mg, potassium-8mg) and *classic dates* show that they are rich in minerals.

The products analysed in Apple Mart Hypermarket of Attavar were cereal products, breakfast cereals, beverages, condiments, milkshakes. The *organic India quinoa* consisted of iron (7mg),Sodium 6 milligrams and calcium 80 milligrams in the product. *Aashirvad atta* contained 4.6 mg of sodium and 4.3 mg of iron. *Kellogg's chocos* had 533mg of sodium, 5 mg of iron and 2mg of zinc. The snack like *Nutritius peanut chikki* contained 41.50 mg of calcium and 4.40 mg of iron. *Britannia Milk bikis* was enriched with 206 mg of sodium, 90 mg of calcium and 25mcg of iodine. Beverages such as *Real fruit juice* had 42 mg of potassium, 20 mg of sodium, 6 mg of zinc. *So good almond beverage* contained 154 mg of calcium. *Hersheys milkshake* had 324 mg of calcium, 85 mg of phosphorus, and 3.5 mg of zinc. *Epigamia milk shake* had 180 mg of calcium, and 90 mg of sodium. Health mix powder like *Complain* consisted of 110mcg of iodine, 13 mg of iron, 4.5 mg of zinc, 400mg of sodium, 900 mg of potassium, and 500 mg of chloride.

The products available in Reliance Smart Super Store of Attavar had many mineral rich foods like cereals of *organic tattwa's rice flour* enriched with calcium (10.8 mg), iron (2 mg) and potassium(278 mg). The table salt from the brand *ashirvad* had been enriched with iodine(≥1.5 mg) and *natural's tattva's rock salt* was low in sodium and enriched with calcium(413 mg), iron(0.33 mg), potassium(364 mg). The *keyllog's special K* breakfast cereal was added with iron.In case of sugars *parry's jaggery powder* was enriched with calcium(259.30 mg) and magnesium(93.30 mg). The bevrages like *sofit soya milk* was high in calcium (120 mg). Some of energy drink mix that were fortified with minerals are *Horlicks women's* + with calcium and iron (10% of RDA), *boost* with iodine, magnesium. *Glucose-D* with calcium. Biscuits of certain brands had mineral fortification on them. They were, *nutrichoice ragi cookies* enriched with zinc and chromium and *bournvita biscuits* with calcium and iron(10% of RDA). *Parle milk shakthi* was enriched with mineral's like calcium(90 mg) amd iron(3.2 mg). There were many milk based drinks that were rich in minerals. *Lassi from from amul* and *britania* were rich in calcium. Milkshakes from *hershey's* were rich in calcium, *storia shake* with potassium and iron. *Calvin's* with added zinc(2.4 mg).

CONCLUSION:

From this survey, we can understand that the commonly enriched foods are very moderately limited like cereals, beverages, milk products, fruit juices, salt, health drink mix, biscuits, breakfast cereals and so on. It also shows the trend of these foods being fast sellers & therefore there was considerable amount

of mineral enriched foods being in the market. Along with this we can also observe that number of mineral rich foods in a pretty good amount in the market and it is not restricted to only a few food groups. Another examined factor is that not only few elements like calcium, iron, sodium, and potassium enriched foods are abundantly available in market but also minerals like iodine, magnesium was seen. Hence, presence of different mineral-enriched food groups in the market and in form of different products will help in mineral intake of various age groups. However other micro mineral-rich foods have to be launched into the market.





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