

Don't Count the Calories, Count the Colours!

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COUNT THE COLOURS !**



The World Health Organization has flagged obesity and diabetes as global epidemics, leading causes of cardiovascular diseases, which are the world's number one killer. The Heart Federation's 2023 report reveals that cardiovascular diseases cause over 16 million deaths annually. A significant contributor to this crisis is the increasing popularity of the Western diet, rich in ultra-processed, easily accessible packaged foods that are known to be pro-inflammatory.

However, there is good news: We can prevent and even reverse these diseases. Diet is the most significant modifiable lifestyle factor, and a healthy diet can provide anti-inflammatory, gut-healing, energy-boosting, hormone-balancing, and mental health benefits.

The Power of Fruits and Vegetables

Inadequate intake of fruits and vegetables (FV) is a leading modifiable dietary risk factor for mortality and contributes to both communicable and non-communicable diseases. In 2017, poor FV intake was responsible for 3.9 million deaths, making it one of the top dietary risk factors affecting disability-adjusted life years worldwide.

Meeting the recommended servings of FV is crucial, but so is consuming a variety of FV types. **Greater variety in FV consumption** has been linked to a lower risk of diabetes, cancer, and mortality, as well as improved cognitive function. Increasing FV variety is particularly critical during childhood to support growth, development, and the establishment of healthy eating habits that persist into adulthood.

The Benefits of Bioactive Pigments

FV are rich in nutrients, including vitamins, minerals, and **bioactive compounds** known as **phytonutrients**. These phytonutrients, which include antioxidants, anti-inflammatory agents, and more, improve health through various properties, such as antibacterial, antifungal, chemoprotective, neuroprotective, hypolipidemic, and hypotensive effects.

Bioactive pigments give FV their vibrant colours and correspond to specific phytonutrient categories, such as:

Phytonutrients and their sources:

- **RED: Lycopene** (e.g., tomatoes, watermelon, pink grapefruit)
- **YELLOW: Alpha-carotene** (e.g., carrots, pumpkins, yellow squash)
- **ORANGE: Beta-carotene** (e.g., sweet potatoes, carrots, butternut squash)
- **GREEN: Chlorophyll** (e.g., spinach, kale, broccoli)
- **PURPLE/BLUE: Anthocyanins** (e.g., blueberries, blackberries, eggplants)
- **WHITE: Flavones** (e.g., onions, garlic, white cabbage)

Additional phytonutrients and their sources:

- **Beta-cryptoxanthin** (e.g., red peppers, tangerines, papayas)
- **Lutein and Zeaxanthin** (e.g., spinach, kale, corn)
- **Flavones** (e.g., parsley, thyme, celery)

Despite the undeniable health benefits of FV, 78% of adults worldwide do not consume the recommended daily servings, leading to a '**phytonutrient gap**.'

Health Outcomes Linked to Bioactive Pigments

Health outcomes improve with the intake of three or more bioactive pigments. For example, high intakes of lycopene, beta-cryptoxanthin, beta-carotene, alpha-carotene, lutein and zeaxanthin, flavones, and anthocyanins are associated with a decreased risk of all-cause mortality.

Tips for Incorporating More FV into Your Diet

- **Eat a Rainbow:** Aim to include a variety of coloured FV in your meals. Each colour represents different phytonutrients with unique health benefits.
- **Smoothies and Salads:** Blend a mix of FV into smoothies or create vibrant salads to increase your FV intake effortlessly.
- **Snacks:** Choose fruits or vegetable sticks as snacks instead of processed foods.
- **Plan Your Meals:** Incorporate a variety of FV in your meal planning to ensure you are getting a diverse range of nutrients.

Remember, by focusing on the colours in your diet rather than just counting calories, you can enjoy delicious meals while boosting your health and preventing chronic diseases!