

## WHAT STOCKS TO CHOOSE NOVA CLASSIFICATION SYSTEM

### PRESERVED FRESH PRODUCE STOCKS i.e. NOVA GROUPS 1, 2 & 3

**NOVA GROUP 1: UN- or MINIMALLY PROCESSED** edible parts of plants, fungi, algae or from animals, or altered in simple ways leaving their composition largely intact and are done to extend their life (e.g. drying, crushing, grinding cooking, heating, chilling pasteurisation, vacuum packaging).

**NOVA GROUP 2: CULINARY INGREDIENTS** Processed culinary ingredients used in the preparation, cooking or seasoning of foods (e.g. fats such as oils and butter, sugars and related products such as maple syrup, and salt), rarely consumed by themselves.

**NOVA GROUP 3: PROCESSED FOODS** are made by adding Group 2 ingredients to Group 1 foods using preservation methods such as bottling, canning, drying, smoking or fermentation to increase the durability of Group 1 foods and modify or enhance their sensory qualities and palatability.

**WHAT STOCKS NOT TO CHOOSE**  
**NOVA GROUP 4: ULTRA-PROCESSED PRODUCTS** are recent industrial creations designed to appeal to palates. Typically, their manufacture begins with the separation of whole foods into components (e.g. starch, sugars, fats, oils, protein and fibre) from mostly industrially farmed high yield crops (e.g. corn, soya, wheat, sugar cane/beet) and ground or pureed carcasses of intensively farmed livestock. Some undergo chemical modification (e.g. hydrolysis or hydrogenation) then more processing (e.g. pre-frying extrusion, moulding) and combined with chemicals (many from the petroleum industry), creating brightly packaged, low-cost, long shelf-life, ready-to-consume, powerfully branded products. A significant subset of Group 4 products/ingredients are drug-foods.

## OUR APPETITE FOR PROTEIN PROTEIN LEVERAGE HYPOTHESIS

How do, say, slime moulds, locusts, wild dogs or monkeys forage for a healthy diet? It's a balancing act for them, as it is for us. Their appetites, as ours, drive them to eat a precise ratio of protein-to-kcal.

For us humans: Children, adolescents & 40-65 year olds need 15% calorie intake of protein. For young adults up to 40 years old, it's 18%. Pregnant & breastfeeding women need 20% to make the extra tissue & milk. For >65s, it's also 20% as older people process protein less efficiently than most.

This three-step example shows how to calculate the amount of protein by weight that a person requires:

**EXAMPLE: An inactive 74-year old man**

**STEP ONE:** He's 190cm tall & weighs 110kg. This calculator measures he needs 2300kcal/day.

**STEP TWO:** He's 74 years old, so a 20%-er. Hence he needs 460kcal of his diet to be protein.

**STEP THREE:** As each gram of protein is 4 kcal, he needs 115g protein per day.

What if he reaches his 2300kcal before he's eaten 115g protein?

**The Protein Leverage Hypothesis says he will carry on eating until he does.**



## INFORMS US WHAT NOT TO CHOOSE NOVA GROUP 4 PRODUCTS

In today's food sector landscape, human appetites are all too often driven askew by corporations responding to commercial challenges and opportunities:

### COMMERCIAL CHALLENGE (A)

To beat competitors and reduce costs.

### COMMERCIAL CHALLENGE (B)

As the requirement for calories, nutrients and fibre in any population group is static, the *only* way to increase demand is to drive different foraging choices.

### COMMERCIAL OPPORTUNITY 1

Animals eat until their daily protein intake is met; e.g. the man in the example is driven to eat 115g *even if that means him under-eating or over-eating calories*.

### COMMERCIAL OPPORTUNITY 2

Although protein is expensive, appetites can be fooled by 'fake' protein umami enhancers, but, crucially, our gut can't be. Low-to-zero fibre content heightens initial taste. (Fibre fills you, definitely *not* in the corporate interest. It also enriches the gut biome and keeps you regular, neither a commercial concern.) *And* there are the addictive effects of drug-foods.

### A NOVA GROUP 4 FORAGING LANDSCAPE

Companies making and promoting low fibre, low protein, palate stimulating, dopamine releasing, obesity inducing products drive a commercially-virtuous demand cycle.

Bigger consumers mean more tissue requiring yet more protein. If this higher protein need isn't met, product demand rises which, if met with yet more low protein products, the body signals the appetite to eat more and more in a vain attempt to meet its protein requirement.

**Corporations that make or promote any NOVA 4 products must be prohibited** from buffer contingency stock planning & fulfilment.