“Ultra-processing” indicator: ewö

The **ewö** rating answers consumers' questions about **the level of ultra-processing of food products**. These questions are becoming increasingly important, as scientific evidence clearly shows that the increase in the consumption of ultra-processed products, which is now observed almost everywhere in the world to varying degrees, systematically comes with a synchronous increase in **health issues** (overweight, obesity, type 2 diabetes, high blood pressure, dental health, mental health, etc.).

It is not easy for consumers to navigate this landscape, as some companies make “health” claims on their products even though they are ultra-processed.

ewö was created to clarify that issue and provide clear-cut information. It is a synthetic indicator that ranks products on a “ultra-processing” scale.

The result of the **ewö** assessment provides information on the profile of the food product:

- **Levels 1 and 2** are products with a **very good or good level of naturalness** (very low or low ultra-processing).
- **Levels 3 and 4** indicate products with a **high or very high level of ultra-processing**.

ewö is designed and developed by a non-profit scientific organization (general interest status).
It is available to everyone **freely and free of charge**. It builds on the work of various research teams and organizations working in the food assessment field, and aims at overcoming the pitfalls of definitions which lacked relevance (too large or too restrictive) and/or were not scalable.

ewö also makes it possible to overcome the criticisms levelled at NOVA by providing a more detailed description of certain characteristics of food products. Some “homemade” products are as ultra-processed than some products bought in stores, when assessed with ewö. Conversely, some industrial products may be well formulated and processed, and consequently obtain a positive ewö rating.

~~~~~

ewö : calculation principles

The **ewö** rating is based on **three criteria** used to establish the degree of ultra-processing of food products:

- **ingredients** which are markers of ultra-processing (e.g., **additives** such as **food dyes and emulsifiers**, fructose-glucose **syrups**, fiber **isolates**, **aromas**, hydrogenated **trans fats**…)
- **processes** which degrade the food matrix (e.g. **puffing, extrusion-cooking…**)
- **sugar content** (sugars are ingredients with specific negative health and metabolic properties that are now well established scientifically)
~~~~~

Step 1:

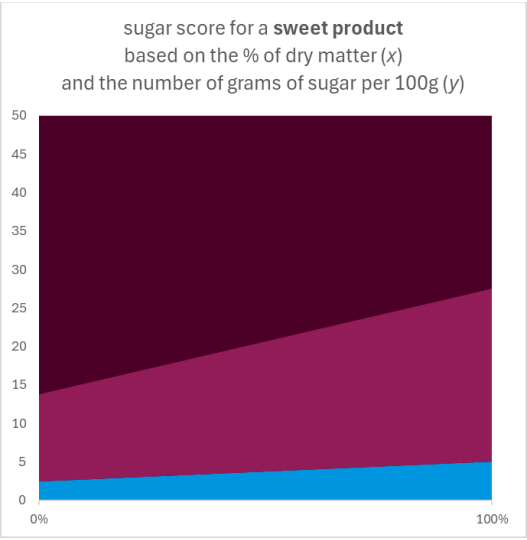
Each <u>ingredient and process</u> is rated from 0 to 4, allowing it to be placed on a **scale known as "MUT"** for "**Marker of Ultra-Transformation**"

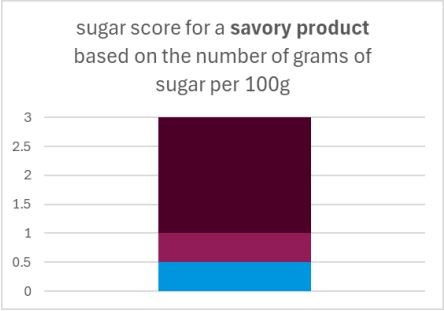
The MUT score for each product or recipe is based on the number of MUTs the product contains, according to the following rule:

	Step 1 : MUT assessment (based on the MUT evaluation of ingredients and processes)
if only MUT0 or MUT1 ingredients and processes (regardless of the number)	
if between 1 to 3 MUT2 ingredients or processes (and no MUT3-4 ing. or pr.)	
if 4 (or more) MUT2 ingredients and/or 1 to 3 MUT3 ing. or pr. (and no MUT4)	
if 4 (or more) MUT3 ingredients and/or 1 MUT4 ing. or pr. (or more)	

Step 2:

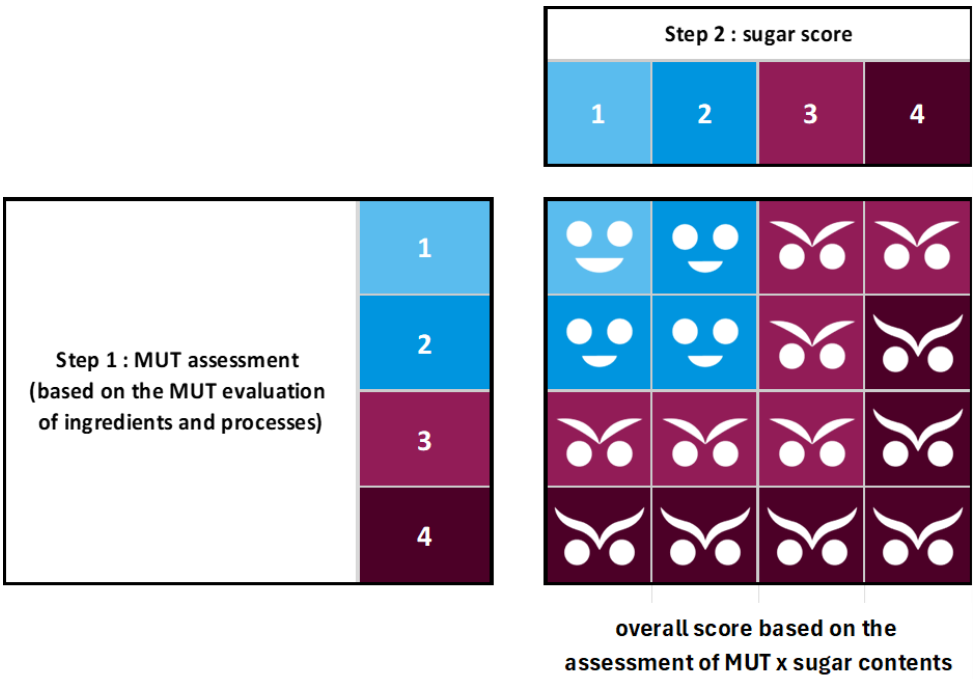
<u>Sugar levels</u> are also translated into a score ranging from 1 to 4, depending on the proportion of sugars in the product. The thresholds used for assessments on this parameter have been defined on the basis of the references of the **Food Standards Agency (UK)**. The algorithm allows sugar levels in solid, liquid, and any intermediate mix of sweet products to be considered, according to the following rule [*threshold: %DM x solid threshold + (1-%DM) x liquid threshold*], summarized in the matrix below on the left (as the sugar thresholds in savory products are very low, this progressive rule is not applied to these products hence the corresponding thresholds are fixed, see matrix below on the right):





The following ingredients are considered **sugars**: sugars & sweet products (concentrated juices except lemon, caramels, sweet dried fruits, honey, glucose/fructose syrups, sweet fillings, etc.).

Step 3: Assessment of the <u>overall ewö result</u> by crossing MUT result (step1) x sugar content result (step2)



~~~~~

How to assess products with the ewö calculator?

To understand the approach and view some product examples, click on "**View examples (and work on variants)**" Once you have chosen an example, click on "**Compute ewö result**" to view the result, including details by ingredient.
You can also rework these examples by adding/removing ingredients or changing the quantities of different ingredients. Click on "Calculate ewö result" again each time you want to view a result.

To evaluate any other product or recipe, click on **"Assess your own recipes"**. Enter the different ingredients, then click on **"Compute ewö result"** to view the result, including details per ingredient. You can rework the product as much as you like to see the variations in the assessment.

~~~~~

Additional information

The issue of **anti-nutritional factors** (such as phytates, oxalates, lectins, etc.), which can sometimes be eliminated by some clean processing methods, has begun to be incorporated into this version and will be more fully integrated into the next version.

The issue of salt content will be addressed in a later version. It is a currently much debated matter, we are waiting for science to be somewhat more settled on that topic.