



The Consumer Voice in Europe

# Food innovation that benefits consumers - What regulatory framework do we need?

Workshop on regulatory challenges  
on innovation in food

Ispra, Italy

8<sup>th</sup>-9<sup>th</sup> October 2015

# BEUC in a nutshell

- European Consumer Organisation
- Umbrella organisation for 41 well respected, independent national consumer organisations, from 31 European countries.
- Mission = to promote consumer interests in EU decision making.



# BEUC members' work on innovation in food

- Consumer research, polls and daily interactions with individual consumers  
Understanding consumer priorities, concerns and expectations
- Food product testing  
Checking compliance with EU rules (e.g. legal limits on food additives)
- Consumer information  
Raising consumer awareness on how food is produced and with which ingredients
- Advocacy work  
Ensuring EU laws take due account of consumer interests

**TEST ACHATS**  
Tous les additifs sont-ils sûrs ?



Voici les additifs à surveiller

■ Douteux ■ Dépassement possible de la DJA ■ Allergène

**Colorants**

- E102 Tartrazine
- E110 Jaune orangé S
- E120 Cochenille (acide carminique)
- E122 Azorubine (carmoisine)
- E123 Amarante
- E124 Ponceau 4R (rouge cochenille A)
- E127 Erythrosine
- E129 Rouge allura AC
- E131 Bleu patenté V
- E132 Indigotine (carmin d'indigo)
- E133 Bleu brillant FCF
- E142 Vert S
- E150a Caramel ammoniacal
- E151 Noir brillant BN
- E153 Charbon végétal médianal
- E154 Brun FK
- E155 Brun HT
- E160b Annatto, Bixine, Norbixine
- E163 Carthaxanthine
- E171 Dioxyde de titane
- E173 Aluminium
- E180 Lithorubine BK

**Conservateurs**

- E200 Acide sorbique
- E202 Sorbate de potassium
- E203 Sorbate de calcium
- E210 Acide benzoïque
- E211 Benzoate de sodium
- E212 Benzoate de potassium
- E213 Benzoate de calcium
- E214 Para-hydroxybenzoate d'éthyle
- E215 Sel sodique de l'ester éthyle de l'acide p-hydroxybenzoïque
- E218 Para-hydroxybenzoate de méthyle
- E220 Anhydride sulfureux
- E221 Sulfite de sodium
- E222 Sulfite acide de sodium
- E223 Métabisulfite de sodium
- E224 Métabisulfite de potassium
- E226 Sulfite de calcium
- E227 Sulfite acide de calcium
- E228 Sulfite acide de potassium
- E249 Nitrite de potassium
- E250 Nitrite de sodium
- E251 Nitrate de sodium
- E252 Nitrate de potassium

**UN BAMBINO COLORATO E BEN CONSERVATO**

Nell'alimentazione di un bambino di età compresa tra i 5 e i 17 anni, con un peso medio di 20 chili, quanti additivi sono presenti? Tanti, purtroppo. Lo dimostra il nostro studio. Per i bambini, a causa del loro peso ridotto, è molto più facile superare la dose giornaliera accettabile (DGA). Abbiamo calcolato la quantità di additivi potenzialmente ingeriti nel corso di una giornata da un bambino. Il calcolo è stato effettuato considerando, per ciascuno additivo, la dose massima che per legge possiamo ritrovare in un certo alimento.

Dunque abbiamo ipotizzato quanti coloranti e conservanti potrebbe ingerire nel peggiore dei casi un bambino mangiando caramelle, macedonia, bevande e così via nel corso di una giornata. In rosso, gli additivi per cui è superata la DGA. Non abbiamo introdotto nei grafici gli edulcoranti, additivi che si trovano nei prodotti senza zucchero, perché difficilmente un bambino può superare la dose giornaliera accettabile.

C'è però da sottolineare che un edulcorante, il ciclamato (E952), è aggiunto, perché finora non vi sono stati studi sufficienti a dimostrarne l'innocuità. Il problema è che, essendo presente in alcune bevande analcoliche "light", bastano due bicchieri per superare la dose giornaliera accettabile di ciclamato: ci sembra che la legge non riesca a tutelare i piccoli consumatori.

I poliacoli (E420 sorbitolo, E421 mannitolo, E953 isomalto, E965 maltitolo, E966 lactitolo, E967 xilitolo) che si trovano nei prodotti senza zucchero non comportano gravi pericoli per la salute. Però, riprendendo i risultati del nostro test su 57/15 agosto 1996, sulle caramelle e la gomma senza zucchero, se un bambino mangia più di 7 caramelle in media al giorno avrà come conseguenza un effetto lassativo dato dalla presenza di questi additivi. E questo può succedere con facilità.

**Which?** Which? works for you  
**Consumer Report**  
April 2013



**The future of food**  
Giving consumers a say

**Lebensmittelklarheit**

- Startseite » Informationen
- Produkte
- Informationen
- Kennzeichnung am Beispiel
- Wunsch-Etikett
- Lexikon
- Forum
- Themenschwerpunkt
- Eigene Studien
- Kurzmeldungen
- Forderungen
- Umfrage
- Service
- Über Lebensmittelklarheit



„Ohne Zusatzstoffe“ gefärbt, aromatisiert, Geschmacksverstärker

Rubrik Herkunft + Region  
„Ohne Konservierungsstoffe“, „ohne Geschmacksverstärker“, „ohne Farbstoffe“, „ohne Aromastoffe“ – Hersteller verleißen Getränke, Milchprodukten, Tiefkühlkost und Fertiggerichten mehr einem so genannten „Clean Label“ ein natürliches Image. Wer auf Zusatzstoffe verzichten möchte, freut sich über diese Angaben. Doch es handelt sich dabei häufig um Produktwerbung, die nicht immer halt, was sie verspricht.

**Versprochen: „natürliche“ Lebensmittel**

Die „ohne xy“-Versprechen auf den Etiketten werden in Fachkreisen „Clean Label“ – saubere Etiketten genannt. Sie vermitteln Verbrauchern den Eindruck, dass es sich um natürliche Lebensmittel ohne unerwünschte Inhaltsstoffe handelt.

Doch die mit Clean Label gekennzeichneten Produkte sind oft längst nicht so „sauber“ und ursprünglich, wie dies auf der Verpackung suggeriert wird. Vielfach werden unbeliebte Zusatzstoffe durch deklarationsfreundliche Alternativen ersetzt, die eine ähnliche Wirkung haben, jedoch von Gesetzes wegen nicht als Zusatzstoff gekennzeichnet werden müssen:

Stellungnahme des Anbieters und aktualisieren den Status.

→ Produkt melden

**EDULCORANTES**

Já foram acusados de provocar crises de epilepsia, esclerose múltipla ou vários tipos de cancro. Sem excessos, os adoçantes são seguros

Muitos alimentos já contêm edulcorantes, além dos que se adicionam à mesa

**Menos tentação no doce**

**der de plak**

SVOER IN DE VRIEZER VAN ALBERT HEIJN; IN DE HAMBURGERS ZIT IN DE BIEFSTUK 87%. DE BIEFSTUK IS NAMELIJK EEN LAPIE STUKJES WAARAN WATER IS TOEGEVOEGD. OOK IN DE VRIEZERS ERMARKTEN BLIJKT HET VLEES VERRE VAN 'NATUREL'.



...ar lang genoeg gewend bent en waarschijnlijk vanzelf het slager Win de Rooij. De Rodenrijse staat in de cursusplan (slagerij). Hij kijkt wat verloggenummerde witte plastic bordjes die op de tafel voor hem staan. Op de bordjes ligt een keur aan luxe vlees uit de vriezers van supermarkten. Het afgelopen uur kreeg hij in een willekeurige volgorde stukken ontdoode rauwe ossenhaas en biefstuk voorgeschoteld door onderzoekers van de Consumentenbond.

Paul van Trigt zet zijn bril af en wrijft in zijn ogen. De vleesspecialist keurde juist hetzelfde vlees als slager De Rooij, maar in een andere volgorde. Onafhankelijk van elkaar keken, voelden, roken en proefden de experts, en gaven zo hun mening over de kwaliteit. Van Trigt is teleurgesteld: 'Ik vond het slecht. Er zijn maar drie à vier stukjes die ik meen naar huis zou willen nemen.'

In een hoek ligt de stapel kartonnen verpakkingen waarin de vacuum erpakte stukjes vlees

Atenção obrigatória aos edulcorantes de mesa e alimentos com adição de mais de 10% de xarope, em excesso causam sérios problemas gastrointestinais.

O seu consumo excessivo pode ter efeitos laxativos.

Sofre de fencilonizant? Não pode ingerir aspartamo. Faça do rótulo o seu melhor amigo

**LOS ALIMENTOS PROCESADOS**

Los alimentos procesados, mas aditivos em menor quantidade, são mais seguros. Demosnstramos e todo para un niño, y que la ingesta diaria adentro y adentro está pensada para un adulto.

**MIEMBRO**  
Etileno, gualtano, glicerina y estabilizantes. No es considerado seguro.

**COMIDA**  
Sandwiches de panecillo cocido con queso, conservantes, correctores de sabor y espesantes.

**MIEMBRO**  
Bebida de leche de zumo y leche condensada, azúcares, colorantes y antioxidantes.

**COMIDA**  
Sopa de sobre. Preparación de color. Saccharina de palo con extracto de almidón. Conservantes, colorantes y potenciadores del sabor. Gelatina de puerro. Conservantes de azúcar y colorantes.

# Conditions for approval – Taking inspiration from the food additives legal framework

## *Article 6*

### **General conditions for inclusion and use of food additives in Community lists**

1. A food additive may be included in the Community lists in Annexes II and III only if it meets the following conditions and, where relevant, other legitimate factors, including environmental factors:

- (a) it does not, on the basis of the scientific evidence available, pose a safety concern to the health of the consumer at the level of use proposed;
- (b) there is a reasonable technological need that cannot be achieved by other economically and technologically practicable means; and
- (c) its use does not mislead the consumer.

2. To be included in the Community lists in Annexes II and III a food additive must have advantages and benefits for the consumer and therefore serve one or more of the following purposes:

- (a) preserving the nutritional quality of the food;
- (b) providing necessary ingredients or constituents for foods manufactured for groups of consumers with special dietary needs;

# Safety as a prerequisite (1)

- **Thorough safety risk assessment** by the European Food Safety Authority followed by EU-level **pre-market authorisation**



***EFSA mandate can be too narrow:** e.g. recent opinion on safety of enzyme thrombin overlooks potential safety issues associated with consumption of rare "glued meat" steak*

- **"No data, no market"**. EU food legislation puts the onus on industry to prove its products/ingredients are safe.  
*e.g. recent withdrawal of five flavouring authorisations after industry missed legal deadline to provide requested toxicity data to EFSA.*
- **Precautionary Principle** to ensure a high level of consumer protection in case science is inconclusive on safety.  
*e.g. food applications of nanotechnologies*

## Safety as a prerequisite (2)

- Safe today ... does not mean safe tomorrow. Need for **post-market monitoring** and **periodic re-evaluation**.

*- Health effects of 'phytosterols' questioned by French food safety agency (following query by UFC- Que Choisir)*

*- Partially hydrogenated oils were a great innovation 100 years ago ... but today the culprit for consumers' intake of harmful trans fatty acids*

- Foods traditionally consumed in third countries **not to be just assumed to be safe**.

*e.g. Eating insects is common practice in many parts of the world and has growing popularity in EU but potential health risks are not to be overlooked: allergens, parasites, etc.*

**anses** ANSES - French Agency for Food, Environmental and Occupational Health Safety

Home > All news > Foods fortified with phytosterols: no demonstration of an overall benefit regarding prevention of ca

Published on 25/06/2014

**Foods fortified with phytosterols: no demonstration of an overall benefit regarding prevention of cardiovascular disease**



Phytosterols are natural compounds found in plants. They can lower blood cholesterol levels by reducing its intestinal absorption through competition. EU regulations authorise claims on the labels of products fortified with phytosterols indicating that phytosterols lower blood cholesterol and on the other that lowering blood cholesterol may reduce the risk of cardiovascular disease. To address the concerns of a consumer association, ANSES is today publishing an Opinion and a Report on this issue. The study they are based on concludes that although phytosterols do indeed contribute to a reduction in blood cholesterol, there is no demonstrated benefit regarding prevention of cardiovascular disease. For people concerned about their levels of blood cholesterol, ANSES recommends personal medical surveillance covering all the levers of prevention, and reiterates its view that these products should not be used by either pregnant or breastfeeding women or by children.

Phytosterols are natural compounds found in plants, especially nuts and oil seeds. Phytostanols are the product of the hydrogenation of phytosterols. As these compounds have a structure similar to that of cholesterol, they compete with cholesterol in the intestine and thus limit its absorption.

On the basis of the available scientific literature, European regulations authorise the claim that phytosterols and phytostanols lower blood cholesterol and that lowering blood cholesterol can reduce the risk of



# Reasonable technological need not otherwise achievable

- Technological need ... for whom?
  - Preventing microbiological growth in meat preparations **vs.** making meat look fresher (sulphites)
  - Maintaining all year-round wheat flour quality **vs.** upgrading low quality wheat flour (enzymes)
  - Preserving taste of fruits transported on very long distance vs. making them look more shiny and appealing (glazing agents and waxes)
  - Preventing excessive water loss during cooking of frozen burger **vs.** binding water (phosphates)

Table 1: Profit increase by selective use of flour and flour improver

	High quality wheat	Average quality wheat
Flour costs per ton [USD]	377.00	342.00
Flour improver cost per ton [USD]	-	9.85
Total flour cost per ton [USD]	377.00	351.85
Flour cost difference per ton [USD]		25.15
Flour cost per ton [%]	100	93.3

Source: Buhler Group [website](#)

# Advantages and benefits for the consumer

- “Food additives, colours, preservatives” are **Top 5 concern** of consumers (after pesticides, food poisoning, diet-related diseases and obesity)

*Source: [Special Eurobarometer 354](#) on food-related risks, November 2010*

- Which?/UK Government Office for Science’s research on [Food System Challenges](#)

*Consumers **prefer solutions that are low-tech, natural or focused on behaviour change**. Hi-tech solutions not rejected out of hand but need for independent safety evaluation, clear benefits and absence of low-tech alternatives which would be publicly acceptable and achieve similar outcomes.*

- Consumer benefits from food innovation:
  - ✓ **HEALTHINESS/REFORMULATION** (reduced fat/salt/sugar levels without compromising taste)
  - ✓ NATURALNESS (no ‘E-numbers’ and chemicals)
  - ✓ CONVENIENCE (e.g. easy to prepare; resealable package; longer shelf life)
  - ✓ SUSTAINABILITY (e.g. better for the environment or animal welfare ... but still affordable; less food waste)

# Advantages and benefits for the consumer – The case of sweeteners

*Article 7*

**Specific conditions for sweeteners**

A food additive may be included in the Community list in Annex II for the functional class of sweetener only if, in addition to serving one or more of the purposes set out in Article 6(2), it serves one or more of the following purposes:

- (a) replacing sugars for the production of energy-reduced food, non-cariogenic food or food with no added sugars; or
- (b) replacing sugars where this permits an increase in the shelf-life of the food; or
- (c) producing food intended for particular nutritional uses as defined in Article 1(2)(a) of Directive 89/398/EEC.

- As other additives, sweeteners shall only be permitted where their use brings benefits to the consumer (**significant calorie reduction or total replacement of added sugars**)
- Discussions at international level (Codex footnote 161). EU should **stick to current approach** for the sake of consumer protection.

# Are labels telling the whole truth to consumers? (1)

- **72%** of households **willing to pay more** for naturally-produced foods *Source: KAMPPFMEYER Food Innovation GmbH. Clean Label [Study](#) 2012.*



“clean label” trend

... BUT

- Processing aids, including enzymes, exempted from labelling requirement
  - ✓ Used in “free from” products conveying image of “tradition”, “naturalness”, etc.
  - ✓ Only case-by-case “effect labelling” for enzymes (e.g. meat glue thrombin and transglutaminase)
  - ✓ Borderline cases for processing aid vs. additive status (e.g. enzymes used in precooked bread?)



# Are labels telling the whole truth to consumers? (2)

## • **Food additive** or “**functional**” ingredient?

Some ingredients bear no E-number ... but are only used to serve a technological function

- ✓ e.g. potato proteins providing volume and texture to gluten-free bakery products;
- ✓ colouring foodstuffs
- ✓ citrus pulp used in meat preparations to retain water.

## • EC guidance on **classification of food extracts/concentrates with colouring properties.**

- Reservations raised by some Member States:

- ✓ May lead to increased use of extracts that have not been assessed for their safe use.
- ✓ What about extracts produced from novel foods of which the sole purpose would be to use them for colouring purposes?

- And what about risk of consumer misleading?

## • Labelling of **nano food additives (TiO<sub>2</sub>, SiO<sub>2</sub>)?**



# ... when not trying to confuse them



- **ECJ landmark ruling** on the labelling of a flavoured fruit tea (June 2015)

*“The list of ingredients may, even though correct and comprehensive, not be capable of correcting sufficiently the consumer’s erroneous or misleading impression that stems from such labelling”*

- Prominent **“free from” claims diverting consumer attention** from the list of ingredients and nutritional composition



- The “obfuscation” strategy (US example): *“potassium sorbate added **to maintain freshness**”* (i.e. a preservative)

# Innovation in food: consumer expectations from risk managers

- Food safety first!
- Beyond safety, approval procedure should also consider “other legitimate factors”
  - ✓ technological need
  - ✓ consumer acceptance
  - ✓ consumer benefits/advantages
  - ✓ risk of consumer misleading



Need to involve and consult consumer groups

- Effective enforcement of EU rules once set
  - Recent FVO audit missions have reported on insufficient enforcement of EU food additive provisions for meat preparations and products



The Consumer Voice in Europe

[www.beuc.eu](http://www.beuc.eu)

[www.twitter.com/beuc](http://www.twitter.com/beuc)

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