EU Nutrition & Health Claims Regulations – Implications for EU Potatoes

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Regulation (EC) No.1924/2006 of the European Parliament on nutrition and health claims made on foods

- All foods & drinks in any communication medium
- Now in force across all EU Member States *in addition to* national rules
- Claims must be pre- approved by the Commission via the **European Food Safety Authority (EFSA)** – *strict procedures*
- Series of transition phases – full compliance is the default /safe position

Products that don't comply

Nutrition and Health Claims

Nutrition claim –any suggestion that a food contains particular beneficial nutritional properties

e.g. source of fibre; low in fat

Health claim –any suggestion of a health relationship

Nutrient function: e.g. vitamin K & normal bones; copper & normal immune system

Disease risk – reduction: e.g. calcium & vitamin D reduce bone loss & fracture risk

Children's health & development – any health claims specific to children: eg calcium & vitamin D & development of children's bone

Prohibited : Medicinal claims = any reference to prevention, treatment or cure of disease

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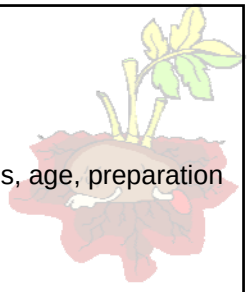
Factors effecting the nutritional composition of potatoes



- **Nutrients affected by:** variety, growing conditions, age, preparation & cooking methods
- **Raw vs. cooked data for making claims?**
  - Potatoes are never eaten raw
  - EU regulations ((EC) No 1924/2006), state that nutrient claims should refer to **food ready for consumption.**
  - **Information on how the product should be prepared should also be provided by the manufacturers (when making nutrient claims).**
- **Does the age of the potato matter? YES** - significant nutritional differences between new & old potatoes
- **Most informative & accessible data source:** McCance & Widdowson (FSA 2002)-

'**Average potato'** = acceptable for generic claims

Which cooking method? Boiled potatoes (for 20 minutes), without added salt = simple & popular

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Products that don't comply

Nutrient claims must be made for 15% of RDA per 100g product

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Nutrition claims possibilities vary with age of the potato

	NEW (in skins) Boiled*	OLD Boiled*
Fat free	√	√
Saturated fat free	√	√
Only naturally occurring sugars	√	√
Low in sugar	√	√
Fibre	**High** source of	Source of
Very low in salt/sodium	√	√
Source of thiamin	X	√
Source of vitamin B6	√	√
Source of vitamin C	√	X
Source of potassium	√	X
Source of folate	X	X

**boiled in unsalted water*

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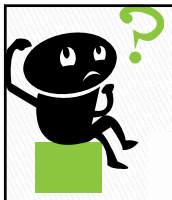
Consumer Perspective: Which one should I believe?



As Raw = Misleading:

Source of:
Thiamin, Potassium & Folate

High source of:
Vitamin B6

As Cooked = Compliant with EU regulations:

Source of:
Thiamin; Vitamin B6

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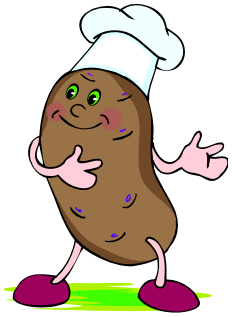
Potatoes: Raw vs. cooked



	New (in skins) Boiled*	New Raw
Fat free	√	√
Saturated fat free	√	√
Only naturally occurring sugars	√	√
Low in sugar	√	√
Fibre	High source of	Source of
Very low in salt/sodium	√	√
Source of thiamin	X	X
Vitamin B6	Source of	High source of
Source of vitamin C	√	√
Source of potassium	√	√
Source of folate	X	X

*boiled in unsalted water

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Potatoes: Raw vs. cooked

	New (in skins) Boiled*	New Raw	Old Boiled*	Old Raw
Fat free	√	√	√	√
Saturated fat free	√	√	√	√
Only naturally occurring sugars	√	√	√	√
Low in sugar	√	√	√	√
Fibre	High source of	Source of	Source of	Source of
Very low in salt/sodium	√	√	√	√
Source of thiamin	X	X	√	√
Vitamin B6	Source of	High source of	Source of	High source of
Source of vitamin C	√	√	X	X
Source of potassium	√	√	X	√
Source of folate	X	X	X	√

*boiled in unsalted water

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Do claims differ between potato varieties?

(NB data for raw only)

	Pentland Crown	Maris Piper	King Edward	Desiree
Fat free	√	√	√	√
Saturated fat free	√	√	√	√
Only naturally occurring sugars	√	√	√	√
Sugar	Sugar free	Low in sugar	Sugar free	Low in sugar
Source of fibre	√	√	√	√
Very low in salt/sodium	√	√	√	√
Source of thiamin	√	√	√	√
Source of vitamin B6	High source of	High source of	High source of	High source of
Source of vitamin C	√	√	√	X
Source of potassium	√	√	√	√
Source of folate	√	√	√	√

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What about rice & pasta?

All boiled in unsalted water	New potatoes (in skins)	Old potatoes	Pasta	Rice
Fat	Fat free	Fat free	Low fat	Low fat
Saturated fat (SF)	SF free	SF free	SF free	Low SF
Only naturally occurring sugars	√	√	√	√
Sugar	Low	Low	Free	Free
Fibre	High source of	Source of	Source of	X
Source of protein	X	X	√	X
Salt/sodium	Very low	Very low	Free	Free
Source of thiamin	X	√	X	X
Source of vitamin B6	√	√	X	X
Source of vitamin C	√	X	X	X
Source of potassium	√	X	X	X
Source of folate	X	X	X	X

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Fibre & Health Claims

- No EFSA-approved function health claim related to fibre & digestive health; glycaemic response; etc.
- Generic 'fibre' claims have been rejected
- Fibre is not well characterised

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Examples of compliance issues 1

Claim currently on website

A 175g serving of boiled new potatoes in their skins provides 11% of your RDA of Vitamin B1. Vitamin B1 (Thiamin) is needed to release energy from carbohydrate. It is involved in the normal function of the nervous system and the heart.

A type of thiamin deficiency affecting brain function can be seen in alcoholics, where daily thiamin intake is low and absorption and use of the vitamin is impaired.

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Examples of compliance issues 1

Claim currently on website	Compliant within EU *(NB function claims awaiting final authorisation)*
A 175g serving of boiled new potatoes in their skins provides 11% of your [illegible] of Vitamin B1 (Thiamin) [illegible] energy [illegible]. It is involved in the function of the nervous system [illegible] the heart. A [illegible] affects [illegible] thiamin function can be seen in alcoholics, where daily thiamin intake is low and absorption and use of the vitamin is impaired.	**Old potatoes are a source of thiamin, which contributes to :** **normal release of energy for use in the body** **normal function of the heart** **normal function of the nervous system** **normal psychological functions**

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Thiamin function claims

Art. 14 claims– for use specifically with children (NB *specified target population)*	Art.13 claims – for use with general population (adults)
Old potatoes are a source of thiamin, which contributes to: *For use only with infants & children up to 3 years* **maintenance of normal neurological development and function** *For use only with infants and children up to 18 years* **normal carbohydrate and energy-yielding metabolism**	**Old potatoes are a source of thiamin, which contributes to :** **normal release of energy for use in the body** **normal function of the heart** **normal function of the nervous system** **normal psychological functions**

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Examples of compliance issues 2

Claim currently on website

Potatoes are a great provider of Vitamin C! Have a medium portion of new potatoes (175g/6oz) and you'll get 44% of your Recommended Daily Allowance (RDA) of this vital vitamin.

Tuck into a medium jacket potato and you're getting almost half the RDA in one go. It's a little known fact that potatoes already provide 15% of Britain's Vitamin C intake.

Promotes the growth and maintenance of bones, teeth, skin and red blood cells, helps repair tissues and helps the body resist stress and infection. Vitamin C is believed to prevent cardiovascular disease, lower cholesterol levels, lower blood pressure, fight allergies and asthma, and aid symptoms of all sorts of diseases from diabetes to osteoporosis.

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Examples of compliance issues 2

COMPLIANT ALTERNATIVE:

100g new potatoes (in skins), provides 19% of the daily reference intake for vitamin C

(Reference intake of an average adult (8400 kJ/2000 kcal))

Potatoes are a great provider of Vitamin C! Have a medium portion of new potatoes (175g/6oz) and you'll get 44% of your Recommended Daily Allowance (RDA) of this vital vitamin.

Tuck into a medium jacket potato and you're getting almost half the RDA in one go. It's a little known fact that potatoes already provide 15% of Britain's Vitamin C intake.

Promotes the growth and maintenance of bones, teeth, skin and red blood cells, helps repair tissues and helps the body resist stress and infection. Vitamin C is believed to prevent cardiovascular disease, lower cholesterol levels, lower blood pressure, fight allergies and asthma, and aid symptoms of all sorts of diseases from diabetes to osteoporosis. (source: www.vitamin-insight.com)

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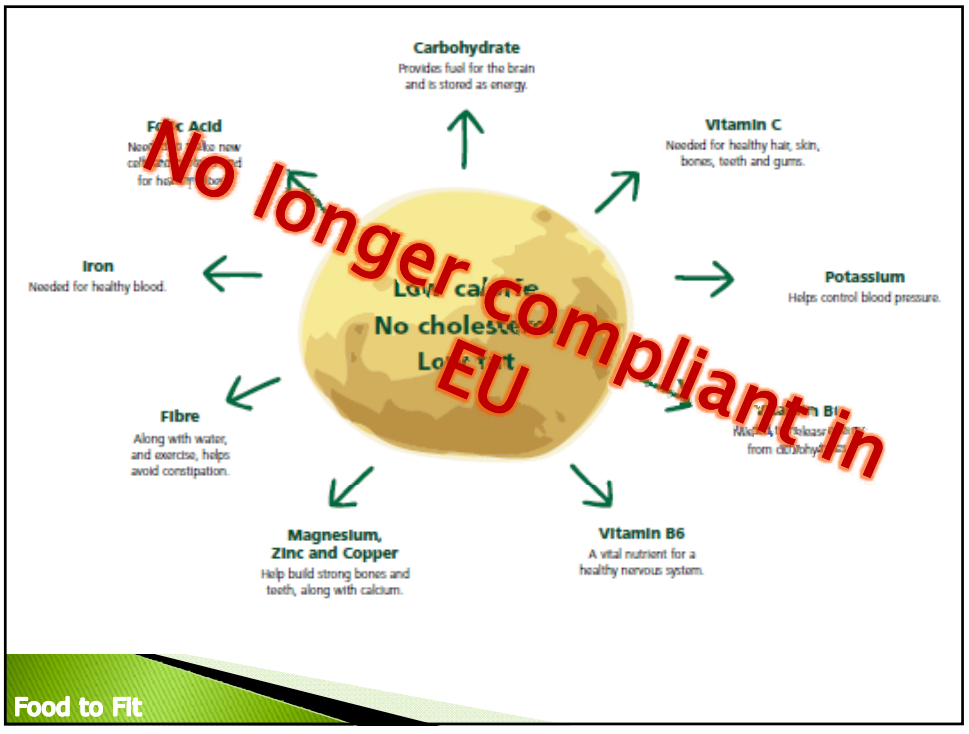
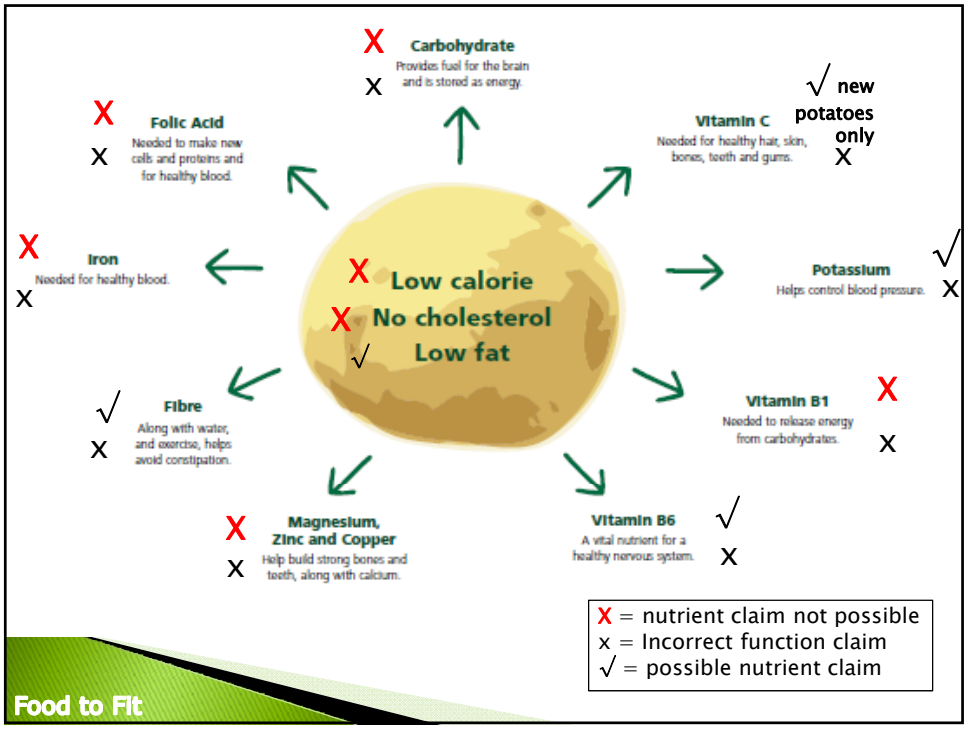
Current claims	Compliant within EU *(subject to final authorisation)*
Potatoes are a great provider of Vitamin C! Have a medium portion of new potatoes (175g/6oz) and you'll get 44% of your Recommended Daily ce (RDA) min. ja you half go. It's a ct that y 's pr he g nce of cells. helps repair tissues and helps the body resist stress and infection. Vitamin C is believed to prevent cardiovascular disease, lower cholesterol levels, lower blood pressure, fight allergies and asthma, and aid symptoms of all sorts of diseases from diabetes to osteoporosis.	New potatoes, in skins, are a source of vitamin C, which can contribute to: Reduction of tiredness and fatigue Maintain the normal function of the immune system during & after intense physical exercise Normal collagen formation for the normal function of blood vessel; bones, cartilage, gum, skin & teeth Normal functioning of the nervous system Normal psychological function Normal release of energy for use in the body Normal function of the immune system Protection of cells from oxidative stress Regeneration of the reduced form of vitamin E Increases (non-haem) iron absorption




X
Carbohydrate
Provides fuel for the brain and is stored as energy.
X
√ new potatoes only
Vitamin C
Needed for healthy hair, skin, bones, teeth and gums.
X
X
Folic Acid
Needed to make new cells and proteins and for healthy blood.
X
X
Iron
Needed for healthy blood.
X
X Low calorie
X No cholesterol
√ Low fat
Potassium
Helps control blood pressure.
√
X
√
Fibre
Along with water, and exercise, helps avoid constipation.
X
Vitamin B1
Needed to release energy from carbohydrates.
X
X
X
Magnesium, Zinc and Copper
Help build strong bones and teeth, along with calcium.
X
Vitamin B6
A vital nutrient for a healthy nervous system.
√
X
X = nutrient claim not possible
x = Incorrect function claim
√ = possible nutrient claim
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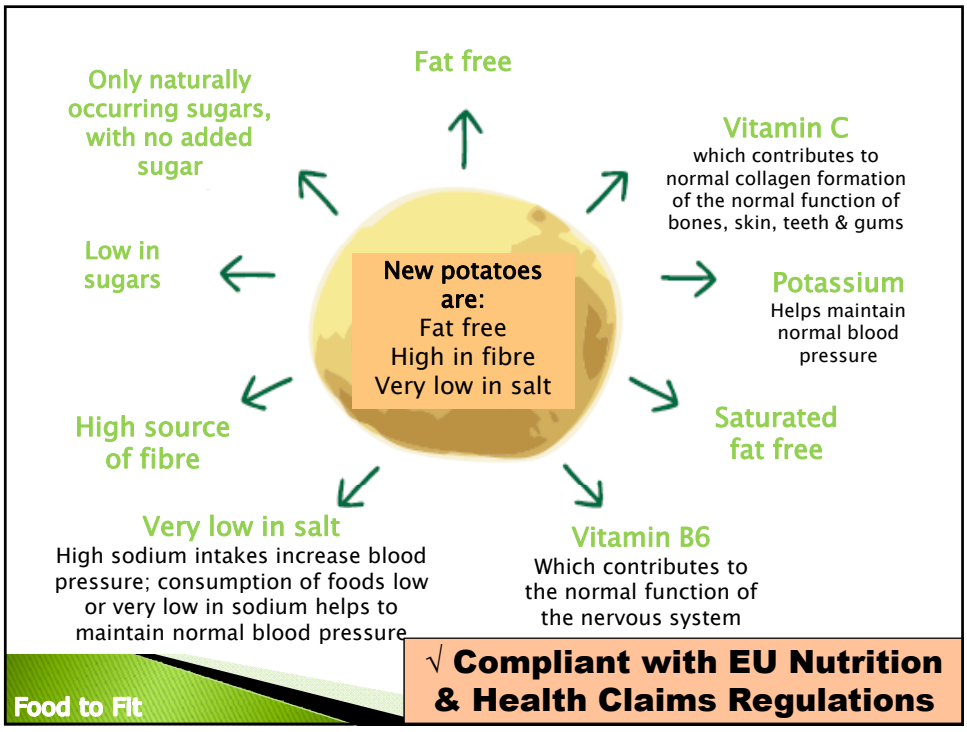
Fat free
Only naturally occurring sugars, with no added sugar
Vitamin C
which contributes to normal collagen formation of the normal function of bones, skin, teeth & gums
Low in sugars
New potatoes are:
Fat free
High in fibre
Very low in salt
Potassium
Helps maintain normal blood pressure
High source of fibre
Saturated fat free
Very low in salt
High sodium intakes increase blood pressure; consumption of foods low or very low in sodium helps to maintain normal blood pressure
Vitamin B6
Which contributes to the normal function of the nervous system
√ Compliant with EU Nutrition & Health Claims Regulations
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Revising claim statements 1:

Potatoes contain **health promoting carotenoids** – a complex class of compound of which 600 types

New potatoes, in skins, are a source of vitamin C, which contributes to the protection of cells from oxidative stress

Potatoes top bananas in potassium content: a medium banana contains roughly 450 mg, while a medium baked potato or 20 French fries contains 750 mg

New potatoes, in skins, are a source of potassium, which contributes to normal muscular and neurological function; & helps maintain normal blood pressure

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Article 9: Comparative claims

1. Without prejudice to Directive 84/450/EEC, a comparison may only be made between foods of the same category, taking into consideration a range of foods of that category. The difference in the quantity of a nutrient and/or the energy value shall be stated and the comparison shall relate to the same quantity of food.

2. Comparative nutrition claims shall compare the composition of the food in question with a range of foods of the same category, which do not have a composition which allows them to bear a claim, including foods of other brands.

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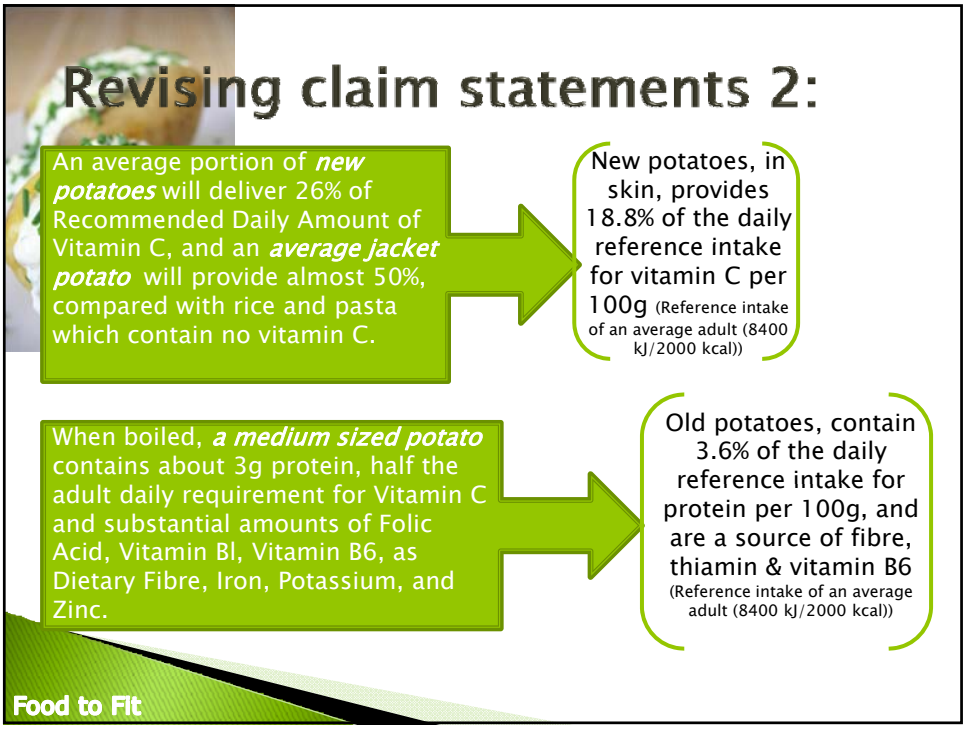

What about sweet potatoes?

*boiled in unsalted water	Sweet Potatoes*	New potatoes (in skin)*
Fat free	√	√
Saturated fat free	√	√
Only naturally occurring sugars	√	√
Low in sugar	X	√
High source of fibre	√	√
Very low in salt/sodium	√	√
Source of thiamin	X	X
Source of vitamin B6	X	√
Source of vitamin C	√	√
Source of potassium	√	√
Source of folate	X	X
High source of vitamin A	√	X
Source of manganese	√	X

Interest as low glycaemic index (GI);
part of healthy diet recommendations

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EU Nutrition & Health Claims Regulations and business….

Good news for:

- ✓ Consumers– their health & their purse
- ✓ *Real* healthy food & drinks
- ✓ Companies prepared to market responsibly
- ✓ Companies with a long term view

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References

- Food Standards Agency (2002) McCance and Widdowson's the composition of foods, sixth summary edition. Cambridge: Royal Society of Chemistry
- REGULATION (EC) No 1924/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 December 2006 on nutrition and health claims made on foods
- REGULATION (EU) No 1169/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004

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