

How to reduce salt AND sugar in Ketchup

Mediterranean Umami is a proprietary savoury mix of sea-salt and vegetable extracts rich in umami, the distinctive flavour-boosting 5th taste. Mediterranean Umami is also rich with a unique blend of naturally occurring monosaccharides. This innovative ingredient can help food manufacturers reduce salt and sugar at the same time, while keeping the savoury and sweet flavours in sauces with a lower amount of sodium and sugar in the finished product.

Mediterranean Umami is highly soluble, kosher, Halal, and without artificial ingredients and no MSG. It provides food companies a much simpler way to include a clean label claim on products and to comply with the regulatory demands to cut sodium and sugar in processed foods.

Consumers are seeking healthier products with less sodium and sugar to help reduce blood pressure, improve cardiovascular health and reduce obesity.

Salt (sodium chloride) and sugars (sucrose, high fructose corn syrups etc.) are widely used in sauces as a taste and flavour enhancer as well as functional ingredients.

Mediterranean Umami effectively enhances salty and savoury flavours AND also enhances sweetness, enabling a significant reduction of sodium and sugar without comprising on the taste.

Currently Ketchup contains approximately 2% salt and up to 30% sugars.

The following trial will demonstrate a reduction of 30% salt and 25% sugar in Ketchup:

Ingredients	Content (%)	
	Reference	30% less salt + 25% less sugar With M. Umami*
Guar gum	0.2	0.2
Sugar	20	15
Salt	2	1.22
Onion powder	0.05	0.05
Preservative (Potassium sorbate)	0.1	0.1
Hot Water 85°C*	34.65	39.43
Vinegar 5%	4	4
Tomato concentrate 28-30 °Bx	39	39
Mediterranean Umami®	0	1
Total	100.00	100.00

*It has been found in this study by initial taste tests results that ketchup with total salt reduction of 30% and 25% sugar reduction with an addition of 1% Mediterranean Umami was the closest match to the desired ketchup taste. Changes in tomato content and stabilizer content may be required to address changes in color and texture.

Procedure

1. Prepare a mixture of all dry ingredients. Mix to an even blend.
2. Add the water to a high speed mixer such as Thermomix. Mix at medium to high speed.
3. Add Mediterranean Umami BOLD and tomato concentrate.
4. Add vinegar.
5. Add the mixture of the dry ingredients.
6. Heat to 85°C.
7. Hot fill containers and close.

