MANUFACTURING
NEM CHUA SAFELY

What is nem chua?

Nem chua is a ready-to-eat meat product originally from Vietnam. The main ingredients include finely minced/ground pork, boiled and sliced pork rind, powdered and roasted rice, spices and additives. The meat paste is formed into cubes or rolls and wrapped in banana leaves or a plastic film. The final product has a slight sour, sweet, salty and spicy taste.

In NSW, these products are made by adding commercial nem powder which contains Glucono delta-lactone (GDL) as an acidifier. Products made with nem powder are **not** considered Uncooked Comminuted Fermented Meat (UCFM). This guideline applies to the production of nem chua using nem powder.

NOTE: If there is a fermentation step involved in the production of nem chua, then the product is categorised as UCFM and this guideline does not apply. UCFM manufacturers must submit a proforma outlining the production process and it must be approved by the NSW Food Authority before the product can be sold. The proforma can be accessed on the NSW Food Authority website (link under 'More Information').

Critical Control Points in making a safe product

The risk of food poisoning from these products can be reduced if the following conditions are followed:

High quality ingredients

- Ingredients must be purchased from reputable suppliers.
- Ingredients must be stored properly as per manufacturer's instructions.
- Fresh, high quality meat must be used.
- Raw meat must be stored under temperature control (less than 5°C) before use.
- Fresh ingredients e.g. garlic, chillies must be cleaned and sanitised before use.
- Commercial packs of spices must be used.
- Nem powder must be used to reduce the pH quickly.
- All packaging material that touches the product (e.g. banana leaves, plastic film, or plastic container) must be cleaned and sanitised before use.
- Previously made product must not be used as an ingredient.

Controlled processing

- All ingredients must be mixed, formed and stored in the refrigerator immediately.
- The **pH of the product must be less than 4.4** within 4 hours of mixing. This will be achieved by using a commercial nem powder.
- Products must be stored under refrigeration for the entire shelf life period. A shelf life study must be conducted to determine the appropriate shelf life.

Regulatory Requirement

Licensing requirement

Nem chua must be produced by a meat processor licensed by the NSW Food Authority.

Permitted additives

For regulatory purposes, nem chua is categorised as a processed comminuted meat product. In terms of food additives, it must comply with Schedule 15 clause 8.3 and Schedule 16 of the Food Standards Code.

Permitted additives in nem chua:

Food additives	Maximum Permitted Limit
Glucono delta-lactone (GDL). Additive number: **575**	Good Manufacturing Practices
sulphur dioxide and sodium and potassium sulphites. Additive numbers: **220, 221, 222, 223, 224, 225, 228**	500 mg/kg
Nisin. Additive number: **234**	12.5 mg/kg
annatto extracts. Additive number: **160b**	100 mg/kg
nitrites (potassium and sodium salts). Additive numbers: **249, 250**	125 mg/kg
propionic acid and sodium and potassium and calcium propionates	Good Manufacturing Practices

Testing requirement

Nem Chua is a ready-to-eat product, so it must be tested according to the requirements outlined in the NSW Food Safety Schemes Manual (the Manual). Manufacturers must also conduct environmental & work surface testing for *Listeria* spp. according to the Manual (link under 'More Information').

Product to be tested	Test to be conducted, the limit and frequency		
	E. coli	*L. monocytogenes*	*Salmonella*
	Not exceeding 3 cfu/g	**Not exceeding 100 cfu/g**	**Not detected in 25g**
Sliced or whole packaged RTE meat and poultry meat products – **ready for sale**	Every 10 batches	Every 10 batches	Every 10 batches

Labelling

Labelling requirement	Comments
Name of the food	Nem chua or other name in English.
Name of the manufacturer and its Australian street address	Not a PO Box number for the address. No Trust name for the business name.
List of ingredients	Must list all ingredients from most to least by 'weight at the time they are added', including colouring and preservatives.
Allergen statement	If the product or ingredients contain any of the most common food allergens, they must be declared, either in the ingredient list (bold font) or in a separate statement such as 'contains peanut'. gluten (if you use wheat flour), shellfish (for example crab, shrimp, prawn), eggs, fish, milk, peanuts, tree nuts (for example almond, brazil nuts, cashews, pistachios, walnut), soybeans, lupin, or sesame seeds.
'Use by' date	Must state USE BY with day/month/year.
Directions for use and storage	The conditions at which the food is required to be stored to ensure that the food will keep until the 'use-by' date. Must say: store under refrigeration. Must also mention that the product is uncooked and ready-to-eat.
Nutritional Information Panel (NIP)	
Country of origin	

More information

- NSW Food Authority's website - http://www.foodauthority.nsw.gov.au/industry

- UCFM proforma - foodauthority.nsw.gov.au/industry/meat/retail-meat-premises-butchers

- licensing information - foodauthority.nsw.gov.au/ip/licensing

- Food Safety Schemes manual - foodauthority.nsw.gov.au/_Documents/industry/food_safety_schemes_manual.pdf

- phone the helpline on 1300 552 406

- email the helpline – food.contact@dpi.nsw.gov.au