

A QUICK GUIDE TO FOOD SUPPLEMENT DOSAGE FORMS

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IADSA

International Alliance of Dietary/
Food Supplement Associations

Supplements are taken by millions of people around the world every day. They are called different names in different countries, including dietary supplements, food supplements, health foods, health supplements and nutraceuticals.

Supplements are designed to be taken in measured small-unit quantities and contain a wide range of ingredients which have a nutritional or physiological effect on the body. These include vitamins, minerals and other substances like omega-3s, probiotics, amino acids and botanicals.

DOSAGE FORMS AND PACKAGING

Food supplements are available in a range of forms that vary in shape, size and colour. These include the established dosage forms such as tablets, capsules, lozenges, powders and liquids, and newer forms such as gummies. These concentrated forms deliver a constant controlled amount of ingredients with a nutritional and/or physiological effect to supplement the diet.

During product development, supplement manufacturers consider many factors when selecting the right dosage form. Depending on the composition, supplements may be better suited to certain forms based on, for example, the product's stability, composition, resistance to gastrointestinal conditions and user experience.

Supplements are widely available through supermarkets, pharmacies, direct selling and many other channels and come in a range of packaging including blister packs, bottles, stick packs and vials.

IT'S NOT ONLY THE FORM THAT MATTERS

The dosage form and colour of a supplement are both important for consumers to distinguish a supplement from other supplements, or from non-prescription or prescription medications that are also delivered in small unit dosage forms such as tablets, capsules etc.

Flavour perception: Consumers expect the colour and flavours to match each other; for example, yellow for lemon/orange flavour, reddish colours for red fruits.

Quality: While colours are added to improve the appearance of a product by masking the off-coloured content, they also play a key technical function to protect the degradation of active nutrients/substances that are sensitive to light; for example, opaque colour for capsules.

Benefit perception: Colours and flavours also contribute to communicating the benefit of a product by sending a message about the function of the supplement; for example, brighter colour for vitality.

Adherence: Food supplements are not taken because they are appetizing but because they provide health benefits. They should therefore not be visually unappealing. In addition, given their small size, colours also make the products more noticeable under certain lighting conditions which is particularly important given the higher consumption rates among older population groups.



THE MOST COMMON DOSAGE FORMS

HARD CAPSULES

FR: Gélules

ES: Cápsulas duras

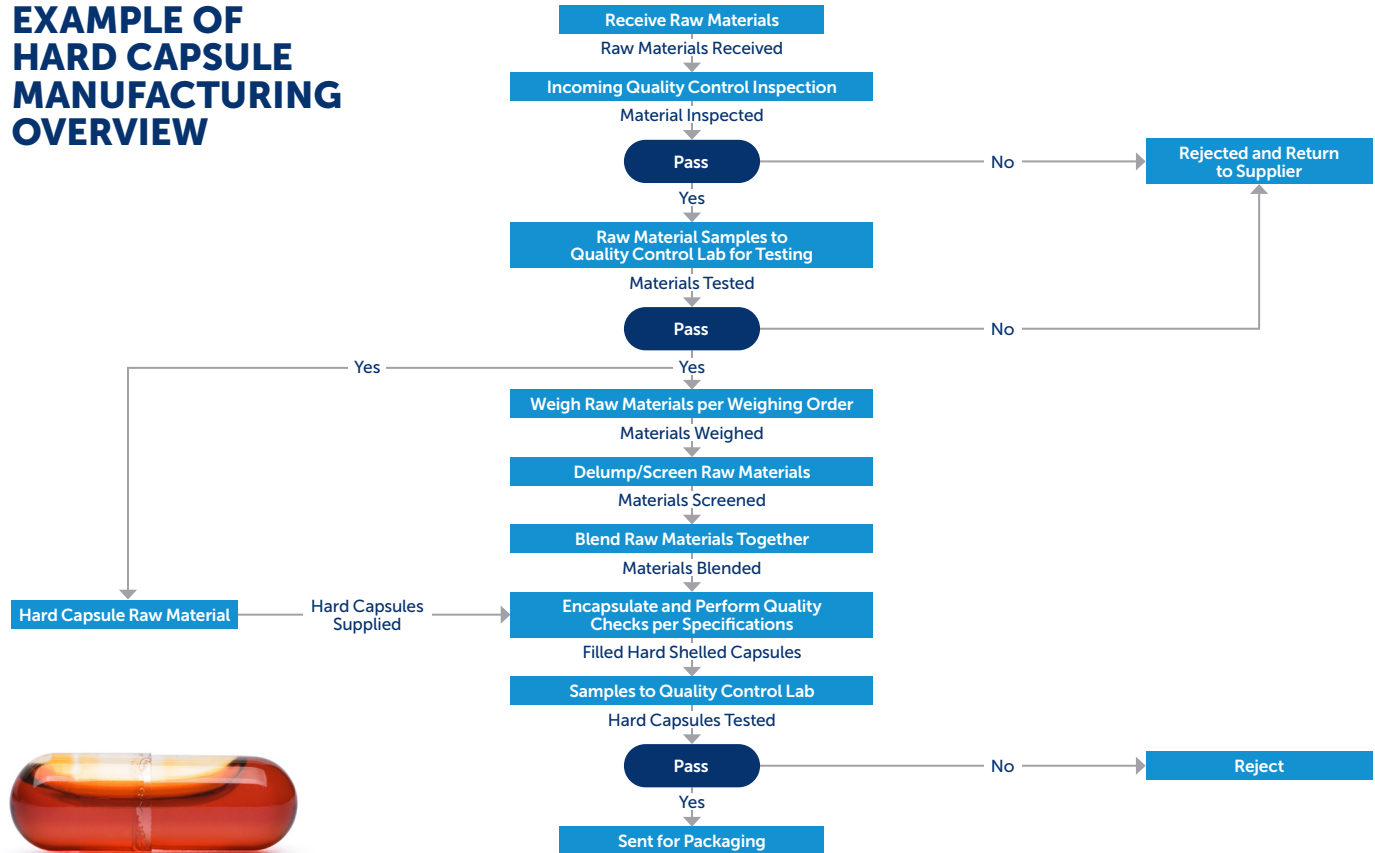


A solid dosage form consisting of a shell and a filling. The shell is composed of two halves that are closed off at one end. Capsule shells may be made from gelatine, starch, cellulose, pullulan or other suitable materials and are filled with dry powders, pellets or liquid ingredients.

CONDITIONS OF USE

- Should be taken with liquid
- Does not require dilution

EXAMPLE OF HARD CAPSULE MANUFACTURING OVERVIEW



SOFT CAPSULES / SOFTGELS

FR: Capsules molles

ES: Cápsulas blandas

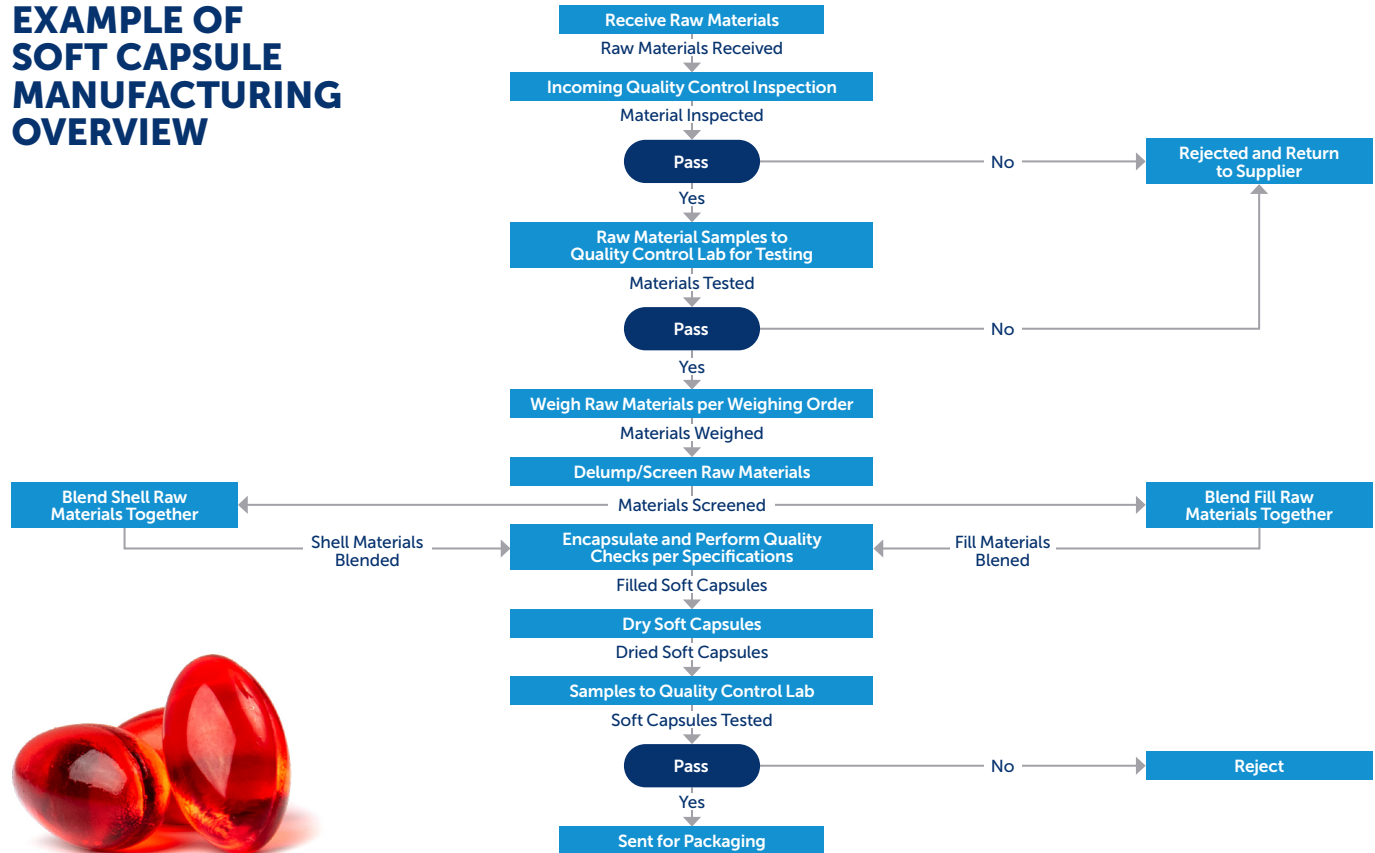


A softgel is a type of soft capsule that is suitable for liquid or semi-solid fillings. Compared to hard capsules, they require additional ingredients such as glycerine, to obtain their soft texture. They are manufactured and sealed in a single process.

CONDITIONS OF USE

- Should be taken with liquid
- Does not require dilution

EXAMPLE OF SOFT CAPSULE MANUFACTURING OVERVIEW



TABLETS

FR: Comprimés

ES: Tabletas / Comprimidos

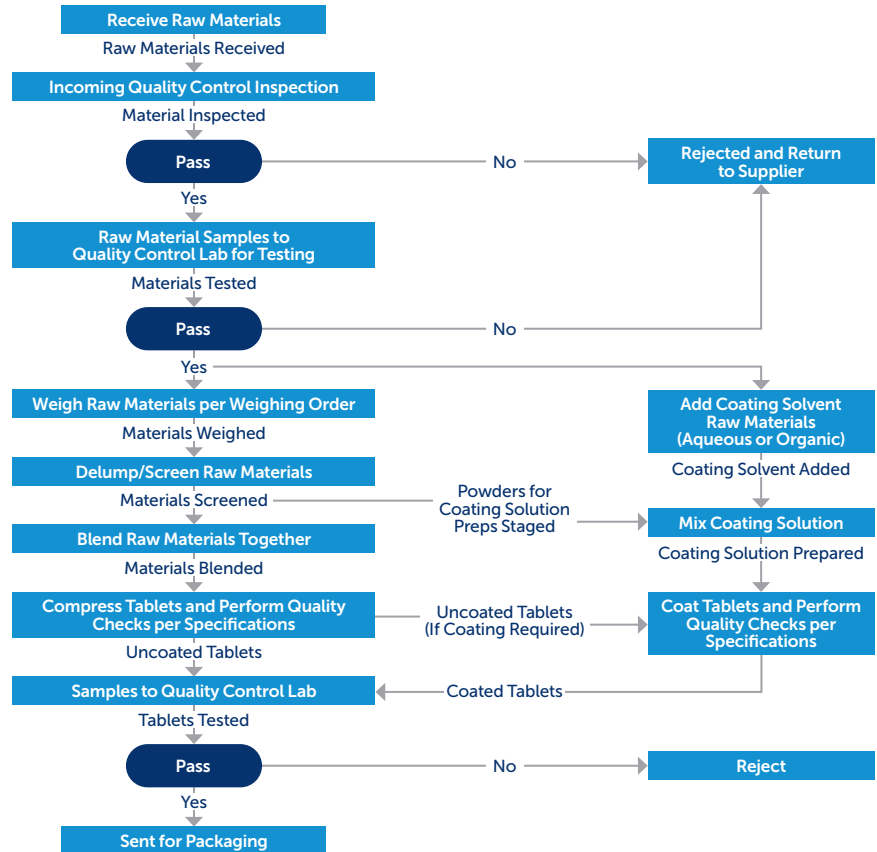


Tablets are composed of a mixture of ingredients usually in powder form that are moulded and pressed into the form of a tablet, which may be circular, oblong or other shapes. The tablet ingredients can be blended uniformly or separated into different layers within the tablet. They can also be coated to improve the product's stability, mask unpleasant taste, and protect the tablet and its ingredients from the stomach's acidity.

CONDITIONS OF USE

- Should be taken with liquid
- Does not require dilution

EXAMPLE OF TABLET MANUFACTURING OVERVIEW



POWDER

FR: Poudre

ES: Polvo



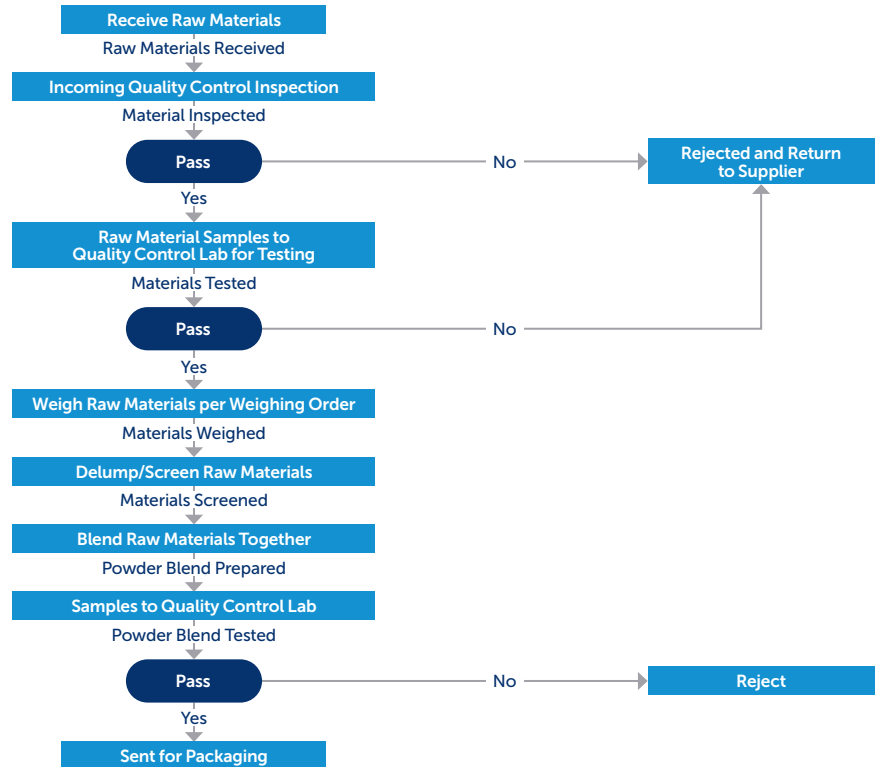
Powder contains active ingredients that can be dissolved into a liquid or sprinkled on food. The serving could be a sachet, stick or measuring scoop, for example.

CONDITIONS OF USE

- To be dissolved in liquid/water before consumption or sprinkled on food



EXAMPLE OF POWDER MANUFACTURING OVERVIEW



LIQUID FORMS

FR: Liquide

ES: Líquido

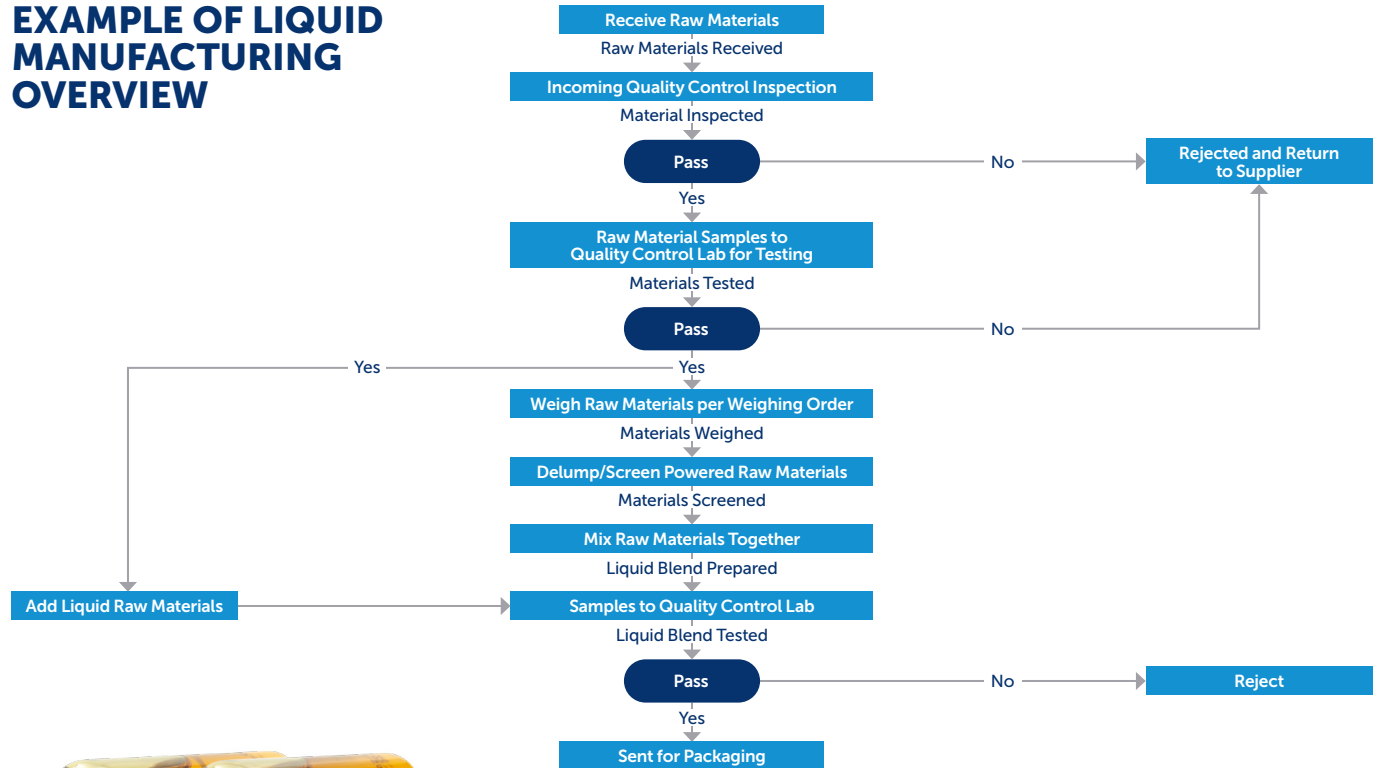


Liquids include a wide range of solutions, syrups, mixtures and may contain sweeteners and flavours to mask the taste of the supplement ingredient so that they are more palatable. They are generally presented in bottles or vials. When they contain more than one single dose, they are accompanied by, for example, a dropper or measuring spoon.

CONDITIONS OF USE

- Some liquids may require dilution prior to consumption

EXAMPLE OF LIQUID MANUFACTURING OVERVIEW



EFFERVESCENT TABLETS

FR: Comprimés effervescents

ES: Tabletas efervescentes /
Comprimidos efervescentes

Effervescent tablets are designed to dissolve when placed in water to release carbon dioxide and create a drink. They generally include colours and flavours to mask the bitterness of the ingredients and provide a good consumer experience.

CONDITIONS OF USE

- To be dissolved in liquid/water before consumption



LOZENGES

FR: Pastilles à sucer

ES: Comprimidos para chupar



Lozenges are solid dosage forms that are intended to dissolve or disintegrate slowly in the mouth. They contain one or more active ingredients and are flavoured and sweetened to be pleasant tasting.

CONDITIONS OF USE

- To be dissolved in the mouth
- Liquid/water is not required

CHEWABLE FORMS

FR: Gommes à mâcher / croquer

ES: Comprimidos masticables



These forms come in a variety of shapes, colours, flavours and textures (hard or soft). They are often taken by people who have difficulty swallowing tablets or capsules. These includes chewable tablets and gummies.

CONDITIONS OF USE

- To be chewed and then swallowed
- Liquid/water is not required

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