

Preparation of texture modified food

- Good food in the care of the elderly



Preparation of texture modified food is published by AB Hällde Maskiner.

Text: Jan Sigurdh, AB Hällde Maskiner

Sources: Livsmedelsverket (Swedish National Food Administration)

– "Bra mat i äldreomsorgen", "Meny och Mat", www.slv.se.

Diet and nutrition – www.kostochnaring.se

Nutrition handbook – Ljusdals municipality, Kjell Olsson

Cover, layout and artwork originals: Eyeris Reklam, Haninge

Images and graphics: AB Hällde Maskiner and Thinkstockphotos.com

AB Hällde Maskiner

Box 1165, S-164 26 KISTA SWEDEN Tel: +46 (0)8 587 730 00 Fax: +46 (0)8 587 730 30 Website: hallde.com E-mail: info@hallde.com



Contents

INTRODUCTION7
FOOD TEXTURE SCALE9
• Whole and cut up
• Coarse paté
• Timbale9
• Jelly10
• Thick liquid10
• Fluid liquid10
•
NUTRITIONAL BEVERAGES AND MULTIPLE MICRONUTRIENT POWDERS13
Complete nutritional beverages
• Clear nutritional beverages13
Multiple micronutrient powders13
CHOOSE THE RIGHT MACHINE FOR THE KITCHEN15
HALLDE machines15
• Table: Result and choice of machine16
HALLDE Vertical Cutter/Blender18
HALLDE Vegetable Preparation Machine19
HALLDE Combi Cutter20
HALLDE Blender/Mixer21
PLAN GOOD FOOD AND SELECT FOODSTUFFS23
• Grain, cornflakes and bread23
• Vegetables24
• Fruit and berries24
• Potatoes, rice and grain25
• Fresh and cured meats25
• Fish26
Milk and dairy products26
Sauces and toppings27

PREPARATION OF TEXTURE MODIFIED FOOD



Life expectancy and the average age are increasing. A growing number of people require assistance in the form of texture modified food. Food and meals are important – not just to satisfy the need of nutrition and energy but also to experience quality of life. Aging increases the risk off illness and malnutrition. It is therefore important that the meals served within the care of the elderly are of high quality and adapted to the needs, habits and preferences of the elderly themselves.

HALLDE has produced advice and hints on how HALLDE machines and equipment can be used in the preparation of texture modified food within the care of the elderly. The purpose is to highlight important aspects regarding texture modified food for the elderly – aimed at personnel groups within the care of the elderly. The advice is mainly based on the recommendations of Livsmedelsverket (the Swedish National Food Administration).



The Food Texture Scale

Many elderly persons in care need texture modified food because of difficulties in chewing and swallowing. The various textures are explained in the *Food Texture Scale* and are divided into groups as follows:

WHOLE AND CUT UP

Whole and cut up refers to food of normal texture that is cut up on the plate when required. Examples of such dishes are whole or cut up meat, whole fish, mince and sausage dishes, vegetables, potatoes, sauces and beverages. Persons who suffer from a dry mouth may need plenty of sauce with their food to make it easier for them to swallow it.

COARSE PATÉ

Coarse paté texture is characterised by light, soft and coarse-grained texture, for example a succulent meatloaf. It is easy to cut up and to eat with a fork. Examples of dishes with this texture are coarse meat paté, whole boiled fish, coarse vegetable paté, well-cooked vegetables, whole and pressed potatoes and sauces.

TIMBALE

The texture is soft, smooth, short and consistent, rather like an omelette, and can be eaten with a fork or spoon. It has moderate chewing resistance and a homogenous texture. It is more porous than coarse paté. Examples of such dishes are meat and fish timbales vegetable timbales/purée, mashed potato, pressed potato and sauces. Plenty of sauce should be served with the dish, since this makes it easier to eat the food. Timbales are prepared with finely strained purée, to ensure a homogenous texture free from small pieces.



The enjoyment of the meal is enhanced if its various components can be experienced separately – with regard to appearance, taste and feel. It is important that this is taken into account when preparing texture modified food. For example, when serving chicken fillet, mashed potatoes, cream sauce and green peas – the texture modified menu could be: chicken timbale, mashed potatoes, cream sauce and puréed peas.

JELLY

This texture is characterised by being soft and slippery, which makes it easy to eat even for those with severe difficulty in swallowing. Food with jelly texture can be eaten with a fork or spoon. Examples of such dishes are cold meat and fish jelly, vegetable purée, cold vegetable jelly, and mashed potato. Having plenty of sauce with their food makes things much easier for those who have difficulty in swallowing. Thick sauce with the texture of sour cream, hollandaise sauce or custard is a good alternative to jelly. Food with jelly texture is made with finely strained purée and gelatine. This makes it wobbly and homogenous, and it melts in the mouth. It is especially important to observe strict standards of hygiene when preparing this type of food since it is served cold.

THICK LIQUIDS

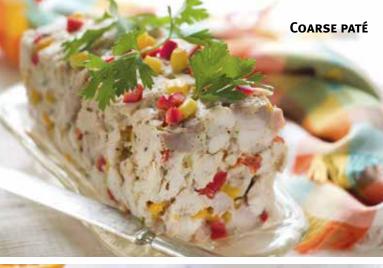
This texture is characterised by being smooth and viscous, similar to crème fraiche. It flows off the spoon in drops but cannot be eaten with a fork. Examples of such dishes are the same as for food with liquid texture, but in a thicker form. The texture is completely smooth, with no small pieces or lumps in the food.

FLUID LIQUIDS

This texture is characterised by being smooth and runny, like tomato soup. It runs off the spoon and cannot be eaten with a fork. Examples of such dishes are enriched meat, fish and vegetable soup served with crème fraiche, and fruit soup with whipped cream. Smooth, enriched, hot and cold soup is included in this texture. The texture is completely smooth, so there are no small pieces or lumps in the soup. Liquid texture is less creamy than thick.

Since only food that is eaten provides nutrients and energy it is important to adapt the composition and portion size of the food to the needs, habits and preferences of the elderly.















As a care worker it is important to be aware of the differences between various nutritional beverages and multiple micronutrient powders — when they should be used and how they should be served and added.

Give priority to nutritional beverages that are nutrient dense since this makes it easier for the elderly to reach their daily requirements.

Nutritional beverages and multiple micronutrient powders

When the need of nutrients and energy cannot be satisfied through the normal diet, nutritional beverages are a suitable a supplement. Nutritional beverages should be highly energy and nutrient dense. A HALLDE Blender/Mixer is ideal for making your own energy beverages with the help of nutritionally calculated recipes.

COMPLETE NUTRITIONAL BEVERAGES

A complete nutritional beverage should contain the body's total need of energy and nutrients. In theory, this means that it should be possible to exist on nutritional beverages alone. A complete nutritional beverage contains lots of fibre and is therefore especially beneficial in the case of e.g. constipation or diabetes. On the other hand it is naturally also good to vary the content and prepare beverages with various levels of energy density, amount of protein, fibre content and taste, adapted to the needs of the elderly. A complete nutritional beverage is therefore ideal as an in-between, evening or night meal.

CLEAR NUTRITIONAL BEVERAGES

Since a clear nutritional beverage is practically fat-free the beverage has a clear, lemonade-like appearance with a distinctly sweet taste – which makes it most suitable as a mealtime drink, in the event nausea or in the case of fat absorption.

The most energy rich clear beverages should be prioritised. For diabetics, the beverage should be consumed in connection with a meal in order to prevent a marked increase in blood sugar level. Vary the energy density, amount of protein and taste of the clear nutritional beverage according to the needs of the elderly.

MULTIPLE MICRONUTRIENT POWDERS

Three are three types of multiple micronutrient powders that can be used as a complement to nutritional beverages. They are energy enrichment powder, protein powder and simple fortification powder – that can be used to add more nutrition to both food and beverages. The addition of cream or oil to food or beverages in order to increase the energy content is also considered as enrichment.





Choose the right machine for the kitchen

HALLDE has a number of machines that are adapted for use in the care of the elderly and health care. Your choice of machine is important. Not just to be able to work quickly and efficiently in the kitchen but primarily to be able to preserve to the utmost extent the taste, colour and nutrients in the food.

HALLDE MACHINES

Regardless of whether vou work

> In designing our machines we apply more than 70 years experience of the food preparation industry. We develop, manufacture and market high quality food preparation machines that are easy to use and clean.

> HALLDE machines are ideal for the preparation of texture modified food - where the texture of the food is just as important as high demands for safety and hygiene.

Our machines are designed with emphasis on:

- A broad range of preparation possibilities
- High capacity
- Perfect results
- · User-friendly design and the best ergonomics
- Fast, easy cleaning and highest standards of hygiene
- Sturdy placement, ease of movability and practical storage
- Exemplary safety
- Highest standards of quality

HALLDE MACHINES CREATE THE RIGHT CONDITIONS

for a successful result



Many elderly people experience that food tastes differently than it did before, or has no taste at all. In most cases, this is due to the fact that the aging process involves changes in the sense of smell and taste. Good, properly prepared food with varied composition creates the right basic conditions to ensure the food is eaten. What are you preparing today?

WHAT ARE YOU PREPARING TODAY?

Result	Structure	Texture
WHOLE AND CUT UP	Normal food that is cut up on the place as required.	As for normal food.
COARSE PATÉ	Light, soft and coarsegrained.	Like succulent meatloaf. Easy to cut and eat with a fork.
TIMBALES	Soft, smooth, short and consistent.	Like an omelette, no bits Can be eaten with fork or spoon.
JELLY	Soft and slippery.	Like currant jelly, no lumps/bits. Can be eaten with fork or spoon.
THICK LIQUIDS	Smooth and viscous.	Like sour cream. Can beaten with a fork but drops.
FLUID LIQUIDS	Smooth and runny.	Like tomato soup (puréed soup) without lumps/bits.
NUTRITIONAL BEVERAGES	Smooth and runny.	As drinks.

A GOOD CHOICE OF MACHINE -

HALLDE Vegetable Preparation Machine	HALLDE Vertical Cutter/Blender	HALLDE Combi Cutter	HALLDE Blender/Mixer
х		X	
	X	X	
	X	X	
	X	X	
	X	X	Х
	X	X	х
	Х	Х	Х



Read more about HALLDE Vertical Cutter/Blenders and download a brochure.

HALLDE VERTICAL CUTTER/BLENDER

HALLDE has developed Vertical Cutter/Blenders that are adapted to the requirements of preparing texture modified food.

HALLDE's Vertical Cutter/Blender programme covers six models with a capacity of 3–6 litres gross volume. All models can process cooked and raw ingredients without the need for adding any liquid at all. This means that the taste, nutritional content and energy density are fully retained during the preparation process.

HALLDE Vertical Cutter/Blenders operate at two speeds, 1,500 and 3,000 rpm, depending on model, which makes it easy to achieve exactly the desired texture.

Specially designed knives and a unique scraper system mean that processing is done at lightning speed – which in turn minimises heating of the ingredients and thereby secures quality and preserves nutritional content.

Working on meal preparation for the elderly should be focussed on preventing malnutrition and promoting good quality of life. It is of the utmost importance that the food is adapted to the individual needs, habits and preferences of the elderly.



Read more about HALLDE Vegetable Preparation Machines and download a brochure.

HALLDE VEGETABLE PREPARATION MACHINES

HALLDE Vegetable Preparation Machines are well adapted to industrial kitchens that prepare and cook texture modified food.

The HALLDE range of Vegetable Preparation Machines covers eight models with capacity from 2 to 40 kg/minute.

All models have a large feeder that makes it easy to prepare large vegetables such as white cabbage and iceberg lettuce. The machines have a wide selection of cutting tools for slicing, making julienne cuts and crimping slices, grating/shredding and dicing in a variety of dimensions.

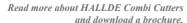
HALLDE Vegetable Preparation Machines operate at 350–500 rpm depending on model. The speed is optimised to give the best possible cutting result – which means that nutritional content is preserved and that liquid is not forced out during preparation. This reduces oxidation and gives longer service life.















HALLDE Combi Cutters are a combination of Vegetable Preparation Machine and Vertical Cutter/Blender in the same machine. The Combi Cutter offers the combined benefits of the Vertical Cutter/Blender and Vegetable Preparation Machine – which makes it ideal for preparing texture modified food.

The machine works in the same way as a HALLDE Vertical Cutter/Blender, with specially designed knives and scraper system. This gives lightning fast processing – and when the machine is used as a Vegetable Preparation Machine

it makes slices, julienne cuts and crimping slices, grates and dices in the same way as a HALLDE Vegetable Preparation Machine instead.

As a Vegetable Preparation Machine HALLDE Combi Cutters have a capacity of 2 kg/minute and as a Vertical Cutter/Blender 3 litres gross volume – which is equivalent to a capacity of up to 80 portions.



Choose the right machine for the kitchen - p. 21

Read more about HALLDE Blender/Mixers



The HALLDE Blender/Mixer has been developed for food preparation in professional catering kitchens and is a very good complement to the HALLDE Vertical Cutter/Blender when liquid and low viscosity ingredients are being prepared. For example, the Blender/Mixer is ideal for preparing nutritional beverages.

The HALLDE Blender/Mixer operates at variable speed up to 15,000 rpm. The high speed means that liquid or low viscosity ingredients are processed very quickly and that soup, for example, can be made with a very fine structure.

Various illnesses and functional impairments can cause difficulties for the elderly in relation to chewing or swallowing. The texture of food then needs to be adapted to the specific needs of the individual – yet they still have the same right to food that tastes good and looks appealing as persons without such problems.













Plan good food and select foodstuffs

When planning food within the care of the elderly it is important to bear in mind that the persons eating the food have had many years in which to discover the flavours and dishes they like. Habits and taste preferences are important factors with regard to appetite and quality of life. Since many elderly persons have a reduced appetite and need to get sufficient nutrients and as much energy as possible, it is especially important to adapt the choice of ingredients and planning of menus to their individual needs and taste preferences.

GRAIN, CEREALS AND BREAD

For many elderly persons bread is an important foodstuff at breakfast and with other meals. Bread is rich in carbohydrates and fibre but in most cases it needs to be complemented with dietary fat and cold cuts to increase the energy and protein content. The type of bread chosen and whether it should be white or wholemeal is best decided based on the needs and preferences of the elderly.

Cereals and porridge are rich in nutrients. Porridge can be prepared from various types of grain and can be energy enriched by making it with milk or adding dietary fat.



With the HALLDE Combi Cutter you can prepare a tasty cold cut paté on bread. The HALLDE Combi Cutter can process both cooked and raw ingredients without the need of any liquid being added.

VEGETABLES

Most vegetables contain important fibre, vitamins and minerals. At the same time they provide little energy because they contain a great deal of water. Vegetables should be included in both lunch and dinner meals but in small amounts. Boiled vegetables are easier to chew than raw ones and can be energy enriched and made easier to chew with the aid of a little dietary fat or by stewing them. Raw vegetables and salads can be cut into small pieces or finely shred and enriched with an oil dressing.



A HALLDE Vegetable Preparation Machine makes easy work of preparing large vegetables such as white cabbage and iceberg lettuce. A good cutting result ensures that the nutritional content is preserved.

FRUIT AND BERRIES

Fruit and berries contain valuable vitamins and minerals. Most fruits and berries also contain fibres, such as pectin, that are good for bowel function. Fruit and berries also provide colour and taste to many dishes. Fresh fruit has low energy content and can therefore be combined to advantage with foods containing fat, such as desserts. Cooked or conserved fruit and berries can be easier to eat.



A HALLDE Blender/Mixer blends C vitamin-rich fruits and berries. Thanks to the high speed the product is processed very quickly into colourful soups, sauces and nutritional beverages.

POTATOES, RICE AND GRAIN

Potatoes are a basic foodstuff and are often included in lunches and dinners. The taste and nutritional content of boiled potatoes suffer from being kept warm and they should therefore be served as freshly cooked as possible. Gratins, as well as stewed or fried potatoes, are often less affected by being kept warm and have less tendency to lose taste. Mashed potatoes are easy to chew and can be enriched, for example, with dietary fat or cream.

Rice and pasta, as well as bulgur wheat, couscous and various legumes can provide variation in the menu and form a complement to traditional potatoes. Choose what the elderly person likes.



Coarsely chop or mash potatoes to make a tasty mash with the HALLDE Vertical Cutter/Blender. The machine has two speeds to achieve the desired texture.

FRESH AND CURED MEATS

Most fresh and cured meats are an important source of protein. Cured meats are often easy to chew and the varieties containing fat also provide plenty of energy. Whole meat can sometimes be difficult to chew and in such cases ground or diced products can be easier to eat. The method of cooking also influences the texture. Even when meat is used in the form of cold cuts it is important to serve a variety that is easy to chew and swallow.



Finely chopped fried diced meat and onions can be prepared quickly and easily with a HALLDE Combi Cutter. Prepare the same ingredients to make a coarse-grained paté for elderly persons with difficulty in chewing.

FISH

Fish is a very important source of essential fatty acids and vitamin D. Fish is easy to chew and both lean and oily varieties of fish can well be included on the menu several times a week. The dietary advice from the Swedish National Food Administration recommends that everyone should eat fish three times a week. Boiled fish often needs to be complemented by energy rich sauces in order to fulfil recommended levels of energy content. Boiled fish often lacks colour and should therefore be accompanied by more colourful garnishes such as dill, lemon, tomato and vegetables to give it a more appetising appearance.



With Vertical Cutter/Blender you can blend fish and potatoes to make a tasty soup. Add a dash of fat or cooking cream to improve the taste.

MILK AND DAIRY PRODUCTS

Milk and dairy products are an important source of, for example, calcium. Dairy products with a high fat content give the food more energy content even when the portions are not large. Fatty milk gives more energy than skimmed milk but has lower content of vitamin D. The type of milk to be served as a beverage is determined by the needs and taste preferences of the elderly person involved. Yoghurt can be served as an accompaniment to various dishes or for breakfast and in-between meals. Cream and crème fraiche can be used in cold and hot sauces, casseroles, soups and other dishes, thus increasing the energy content.



A HALLDE Vegetable Preparation Machine has a wide range of cutting tools for slicing, making julienne cuts and crimping slices, grating/shredding and dicing. Ripple sliced carrots with fresh yoghurt dip are not only attractive to serve but contain both A vitamin and calcium.

SAUCES AND TOPPINGS

Sauces are an important accompaniment to most dishes. The sauce adds to the taste of the food and can be an important energy supplement if enriched, for example, with dietary fat or cream. The sauce also makes it easier to swallow the food and it is therefore a good idea to offer plenty of sauce with all dishes, even those not traditionally served with sauce, such as casseroles.



Prepare a tasty and nutritional dipping sauce with a HALLDE Blender/Mixer – it can be used to mix, blend, stir and chop the ingredients for soups, sauces, roux, nutritional beverages and juices.

MAKE AN ACTIVE CHOICE

HALLDE has a number of machines that are adapted for use within the care of the elderly and health care. This folder describes only a few of our recommended models. Which machine do you need?













Life expectancy and the average age are increasing. A growing number of people require assistance in the form of texture modified food. Food and meals are important – not just to satisfy the need of nutrition and energy but also to experience quality of life.

HALLDE has produced advice and hints on how HALLDE machines and equipment can be used in the preparation of texture modified food within the care of the elderly. The purpose is to highlight important aspects regarding texture modified food for the elderly – aimed at personnel groups within the care of the elderly. The advice is mainly based on the recommendations of Livsmedelsverket (the Swedish National Food Administration).