



# A guide to the IDDSI Framework

**Texture Modified Meal Solutions** 

# WHAT IS dysphagia?

The normal swallowing process is controlled by nerves and muscles, which ensures that the food in your mouth goes safely into your stomach, without really having to think about it.

However, for people living with dysphagia, swallowing isn't coordinated properly, so when food and liquid goes into the mouth, there can be a delayed response, making eating and drinking a difficult process, with the risk of food, fluids and saliva going down the wrong way and even going into the lungs (aspiration). This can increase the risk of choking, getting a chest infection and may even lead to pneumonia.

There are a number of health conditions that can lead to dysphagia, such as dementia, stroke, Parkinson's or for those recovering post-surgery. A **Texture Modified Diet** can be introduced to support people to swallow safely. This will contain carefully selected foods of an appropriate consistency, which can be more easily managed by a person with dysphagia, allowing for a safer swallow.

You can find all of the information from this guide, plus more recipe inspiration at countryrange.co.uk or by scanning this QR code





For help, advice or further information on anything covered in this guide simply contact our team.

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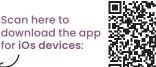
## **The IDDSI** Framework

The IDDSI (International Dysphagia Diet Standardisation Initiative) Framework was introduced in April 2019 and provides a common terminology to describe food textures and drink thickness. It consists of a continuum of 8 levels (0 - 7), where drinks are measured from Levels 0 - 4, while foods are measured from Levels 3 – 7.

The guidance also includes detailed information about how to test and ensure that each level of liquid or food is acceptable for patients at that level to consume safely. Use this simple guide to familiarise yourself with the levels and gain some simple and practical ideas to create texture modified meals in your kitchen.

This guide is not exhaustive and we recommend that you read more about the IDDSI Framework at iddsi.org as well as downloading the free app:







Scan here to download the app for android devices:

Drinks est

When evaluating drinks and liquidised foods, there is an IDDSI gravity flow test using a 10ml syringe, as a simple, easy to use, practical objective measure to classify drinks based on their rate of flow.



You can find out more about this and all testing methods here

FOODS REGULAR

TRANSITIONAL FOODS EASY TO CHEW

SOFT & BITE-SIZED

MINCED & MOIST



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About Andy Cullum

Andy Cullum delivers IDDSI training to chefs on modified meals as he believes for meals

to be served safely, the chefs must have an understanding of dysphagia. He has a wealth of experience and knowledge and supports various groups within the care sector with the goal of improving the foods they prepare and serve in care home settings.

Andy's journey started when a family member was in a care home, and he was taken back by the poor standards of the meals that were being served and wanted to make a difference.

He currently works for Avery Healthcare and his hard work and dedication in the sector have recently been recognised with a prestigious Public Sector Catering Training & Apprenticeship Award.

Andy has kindly worked with us to create some simple methods to make a range of texture modified meals with advice on using the IDDSI testing methods.

You can connect with Andy on LinkedIn here https://www.linkedin.com/in/andrew-cullum-13917a79/ or via his website https://www. theiddsiguy.com/

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Food Levels explained

#### LEVEL 3 – LIQUIDISED

Level 3 food should be puréed separately and passed through a chinois/sieve to ensure it is lump free.

It can be served in a ramekin. Always check the consistency of the food before serving. It should be completely smooth and lump free.

#### **HOW TO TEST:**

- Drips slowly in dollops through the prongs of a fork.
- Prongs of a fork do not leave a clear pattern on the surface of food.
- Spreads out if spilled onto a flat surface.
- Easily pours from a spoon when tilted.
- Does not stick to a spoon.

iquidised

#### LEVEL 4 - PURÉED

Level 4 food should be able to hold its own weight but should not be sticky. It can show some very slow movement under gravity, but cannot be poured.

The food can be piped, layered or moulded. Liquid must not separate from the food. All elements of the meal should be puréed separately and be completely smooth and lump free.

#### **HOW TO TEST:**

- To check it is smooth, taste the purée, rolling the food around between the tongue and the roof of the mouth.
- Food sits in a mound or pile above the fork.
- A small amount may flow through and form a tail below the prongs of a fork, but it does not flow or drip through continuously.

- The prongs of a fork can make a clear pattern on the surface of the food and the food retains the indentation of the fork.
- Cohesive enough to hold its shape on a spoon.
- A full spoonful must drop off the spoon, when the spoon is tilted; a very gentle flick may be needed to dislodge the food from the spoon.
- The food should slide off easily, with very little food left on the spoon.
- May spread out slightly or slump very slowly on a flat plate.

Puréed

 If the food does not fall off the spoon when tilted or stick to the spoon, then it is too thick.

#### **LEVEL 5 - MINCED & MOIST**

#### Food should be soft & moist with no separate thin liquid. The pieces of food should be no bigger than 4mm in size.

This can be checked by ensuring the food fits in between the prongs of a standard fork. Measure the distance between the prongs to be sure it is 4mm. Food needs to be pre mashed and plated before reaching the resident. Biting is not required and particles of food can be easily squashed with the tongue.

#### HOW TO TEST:

- When pressed with a fork the particles of food should easily be separated and come through the prongs of a fork.
- Food can easily be mashed with little pressure.
- The food is cohesive enough to hold its shape on a spoon.
- A full spoonful should slide off the spoon when tilted, turned sideways or shaken lightly.
- The food should slide off easily with very little food left on the spoon – it should not be sticky.

#### LEVEL 6 - SOFT & BITE SIZED

Bite sized pieces of all food items must be no bigger than 15mm and soft and tender throughout, with no separate thin liquids.

Gravy and sauces must be very thick. Level 6 food can be mashed and broken down with the pressure of a fork or spoon, before serving and stay in the mashed shape when the fork is removed. Biting is not required, but chewing is.

#### HOW TO TEST:

- Pressure from a fork held on its side can be used to cut or break this texture into smaller pieces.
- When a sample of food 15mm x 15mm is pressed with the base of a fork or spoon with 390g of pressure, the food squashes and changes shape, and does not return to its original shape when the fork is removed.
- Pressure from a spoon held on its side can be used to cut or break this texture into smaller pieces.

#### LEVEL 7 - REGULAR FOOD (EASY TO CHEW)

In response to testing method for foods that are "soft" but with no particle size restriction, IDDSI have announced level 7 regular easy to chew.

This new subcategory of Level 7 is designed to meet the needs of individuals who do not have an increased choking risk but might benefit from softer choices. This level is suitable for individuals who have the ability to regulate bite size and their pace of eating and do not exhibit mealtime behaviours that might increase their choking risk.

#### HOW TO TEST:

- Foods should be soft and tender and can be cut or separated easily with the side of a fork or spoon.
- Foods do not need to be cut or presented in any specific particle size.

Regular Food (easy to chew)

Munced & Moist

Soft & Bite Sized





Snacks and Light Bites

Andy says, "We have a tendency to believe that snacks add too much extra work in the kitchen and therefore we don't provide enough.

However, with some clever planning, there's no reason why we can't provide a fun and easy range of snacks that can be served throughout the day. Here are some ideas to get you started."



"For all of my methods – any quantities and measurements are a guide only. The only way to ensure that food is at the correct consistency for the relevant level is to keep testing throughout and thickening as you go, using the testing methods on pages 4 – 5 and via the IDDSI app."



## 3 ways with Bread

"Here, I demonstrate how to make texture modified bread for Level 4 and how this can then be used to create a chicken and salad wrap or a sandwich, as well as being turned into a slice of 'toast' alongside a tuna and chick pea mousse."



"When blending lettuce, we need a grinding agent and for this I use brown sugar."

Itsp Country Range

Itsp Country Range

**Itbsp Country Range** 

Malt Vinegar

**Skimmed Milk** 

Food thickener

Olive Oil

Powder

• 300ml milk

#### INGREDIENTS

- I bag of rocket or mixed leaf salad (if using mixed leaf salad, remove the red leaves as this will turn your purée red)
- 1 cucumber, peeled
- A dash of Country Range Lemon Juice
- Itsp brown sugar

#### METHOD

- 1. Add the salad leaves, cucumber, lemon juice, brown sugar, olive oil and vinegar to your blender / food processor and blend to a paste.
- 2. Add the milk powder.
- 3. Add milk until all stickiness is removed.
- 4. Now, keep testing the consistency and adding food thickener until it passes the Level 4 testing methods for Level 4 puréed food.
- 5. Pass through a sieve and check seasoning.

The bread

#### INGREDIENTS

- Half a loaf of Country Range White Sliced Bread with the crusts removed
- Itbsp Country Range Skimmed Milk Powder
- 1pt milk
- Food thickener
- Salt and pepper to taste

#### **METHOD**



- Put bread in your blender / food processor (I use a Robot Coupe Blitzer) and a small amount of milk.
- **2.** Blend, adding the milk gradually until you have removed the stickiness of the bread.
- 3. Add salt and pepper and the milk powder.
- **4.** Now, keep testing the consistency and adding food thickener until it passes the Level 4 testing methods for Level 4 pureéd food.

#### TOP TIP

Add 2tbsp Country Range Ground Almonds to the bread mixture for added protein.

### Use the drop test from the IDDSI guidelines to test for Level 4.



Repeat the process to create a tomato and chicken layer. See the full method online.  $\searrow$ 

Use the Level 4 Katsu Chicken from your main course (page 12) to create the chicken layer of your wrap or sandwich.

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When fortifying meals, it is important to use nutrient rich ingredients rather than saturated fats.

## To make the wrap



- 1. Cover a metal tray with cling film and sprinkle with Country Range Gravy Powder. This creates the toasted effect on the outside of the wrap!
- Add a thin layer of bread mix, using a hot pallet knife. You will find that this will spread easily and not stick to the pallet knife.
- 3. Put the tray in the freezer but DO NOT Freeze, you want the mix to be firm, but not frozen. If you freeze then ice may form in your mix and it won't hold as it will change consistency.
- **4.** Repeat this process with your other fillings, layering one on top of the other.
- **5.** Once all the layers are on you can then roll your mix into a cylinder. If the mix is too thin then it won't hold, if the mix is too thick then it will snap. This may take some practice.
- 6. Once rolled, cover with cling film and freeze.
- 7. When you cut the wrap use a hot knife and ensure that your slices are no more than 1 inch to ensure that it holds its shape when it defrosts.
- 8. When you cut the wrap, you will now see that it looks like a wrap and the gravy browning that was added at the start has soaked into the bread mix, giving it an authentic look.

TOP TIP

The sandwich and wrap should be served at room temperature.

To make the sandwich

This is the same principle as the wrap, except this time, don't add gravy powder to the tray. Create your layers as follows:

- 1. Level 4 bread mix at 1cm thickness.
- 2. Thin layer of level 4 lettuce.
- 3. Thin layer of level 4 chicken.
- 4. Thin layer of level 4 tomato.
- 5. Level 4 bread mix at 1cm thickness.

Again, once completed, cover in cling film and freeze, then use a hot knife to slice into sandwiches. A top tip is to use gravy browning to make the sandwich look like it has crusts – simply paint it on!

> Scan here for the full recipe





Sausage Roll

You can use the same method as the wrap to make a sausage roll! Simply replace the Country Range White Sliced Bread with a Country Range Shortcrust Pastry Block which has been rolled out, baked, cooled and crust removed. Once blended and tested for Level 4 puréed, line a baking tray with cling film and spread the mixture out at 0.5cm thickness. Put into the freezer to set but not freeze. Make the sausage filling by blending braised sausage meat with milk and thickener until it passes the Level 4 puréed food test. Pipe this onto the set pastry and again set in the freezer before rolling, freezing and cutting. You can brush with gravy browning to give it a glazed baked pastry appearance. Warm in a steamer to serve warm.

Tuna and Chickpea Mousse

#### INGREDIENTS

- 800g Country Range Tuna Chunks in Brine
- 100g Country Range Chick Peas in Water
- 1 tbsp Country Range Skimmed Milk Powder
- Country Range Lemon Juice to taste
- Salt and pepper
- 150ml milk
- Food thickener

#### METHOD

- 1. Add the tuna, chick peas, milk powder and a squeeze of lemon juice to your blender / food processor.
- 2. Blend in the milk to form a mousse.
- Now, keep testing the consistency and adding food thickener until it passes the Level 4 testing methods for Level 4 puréed food.
- **4.** Serve alongside a slice of the texture modified bread, painted with gravy browning to give it a toasted appearance.







"We're always looking to improve, and our residents are becoming more experimental each year so my wholesaler and the Country Range brand have been a massive help in driving our creativity." Care Home Chef

The Main Course

Andy says, "When it comes to main meals, keep things simple by preparing the same dish which you can modify to the appropriate levels for your diners. With changing tastes and preferences, don't be afraid to experiment with bold flavours and different cuisines. Here, I show how two dishes can be modified for each level.

Remember, the only way to ensure that food is at the correct consistency for the relevant level is to keep testing throughout and thickening as you go, using the testing methods on pages 4 – 5 and via the IDDSI app."

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When preparing your protein items, avoid frying, grilling, roasting or baking, as this can cause it to dry out. Promote poaching, braising, steaming and stewing as this will make the protein more tender and easier to modify.

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Braised Steak for everyone

There is no reason why your braised steak dish cannot be modified for all levels. Here is how I do it:

#### METHOD:

- Before cooking, dice one portion of your braising steak to 1.5cm (15mm) or the distance between the outer prongs of a fork – this is for level 6 diners.
- 2. Roll all of your braising steak in seasoned flour and pan fry to seal.
- Slowly cook your braising steak in the oven until tender. Try not to stir so that you don't break up the meat.

- 4. Now separate into 3 portions:
  Your level 7 portion which is of no size restriction.
  - Your level 6 portion which was diced before cooking.
  - The remaining 3 portions for levels 3, 4 and 5 can go into the blender together. Make sure the bowl is hot to avoid dropping the temperature.
- 5. Blitz in the blender until the mixture passes the level 5 testing methods and then remove your level 5 portion.
- For level 4, add hot milk and milk powder and blend until the

mix is smooth and not sticky. Add thickener until it passes the level 4 testing methods. Add seasoning and pass through a sieve.

 For level 3 blend separately. The purée must be sieved with no lumps and no separation of liquid. Use the testing methods on page 4 or on the IDDSI app.

Regular Food (easy to chew)





Soft & Bite Sized

If you add gravy to levels 3 & 4 when blending, it will become unappealing in colour. Instead, add milk to create a more realistic shade. Gravy can be added to levels 5 & 6 but must be bound into the protein item.

Katsu Chicken Curry

Now let's spice things up! Here, I've used Country Range Katsu Curry Sauce to create a delicious chicken katsu curry with rice for all levels.

The method is the same as the braised steak, with the chicken being slowly braised in the Katsu Curry Sauce.

Country Range Katsu Curry Sauce 2 x 2.3kg



Try using a different plate for a special occasion

Rice for each level

#### First, boil your rice and then prepare as follows:

- Level 7 this can now be served.
- Level 6 use white sauce to bind the rice and serve.
- Level 5 blitz in a hot blender until it passes level 5 testing methods.
- Level 4 add hot milk and milk powder, blend until the mixture is smooth and not sticky. Add thickener until it passes the level 4 testing methods. Pass through a sieve into a piping bag and store in a hot cupboard until ready to use.



Vegetables

### Vegetables can be boiled or steamed before modifying using the same methodology.

Beware vegetables with husks such as peas, beans, sweetcorn and tomatoes. These can be problematic as the husks do not break down and are difficult to chew which can lead to choking. These must always be served at level 4 and passed through a sieve.

Plating up

We eat with our eyes so it's important that the food we serve is visually appealing for our diners. It can seem daunting at first, but trust me, with a little practice, you'll be surprised at what you can achieve. I mainly use piping bags which are great, as you can prepare your mixes in advance and keep them in thick, disposable piping bags in the hot cupboard, ready to serve. It also means you don't need lots of fancy moulds or equipment.





Taking care over presentation makes all the difference to a person's appetite.

# Sweet Treats

Chocolate Dam Sponge

Andy says, "Desserts and sweet snacks can have the power to brighten up someone's day, so it's important to ensure that you have some options to offer your diners with dysphagia. I'm going to show you how you can use one simple sponge mix to create a range of sweet treats, with varying degrees of simplicity."

"Remember, the only way to ensure that food is at the correct consistency for the relevant level is to keep testing throughout and thickening as you go, using the testing methods on pages 4 – 5 and via the IDDSI app."

### TOP TIP

We have thickened the cream as it is a translucent item. I recommend using a dash of vanilla essence to take away the taste of the thickener. For more information about translucent foods, see the IDDSI app or visit iddsi.org.

Sponge

"I haven't included quantities here as this is dependent on the amount of sponge that you make."

#### INGREDIENTS

- Country Range Plain
   Crème Cake Mix
- Country Range
   Skimmed Milk Powder
- Milk
- Vanilla essence
- Food thickener (not prescribed)

#### METHOD

- Make up a batch of sponge using the dessert mix, spread onto a baking sheet and bake according to packet instructions.
- 2. Remove any crust so that you only have soft sponge cake.
- Add to your blender with milk powder (for fortification) and blitz with some milk – keep adding the milk until you've taken away any stickiness.
- 4. Add thickener and keep testing until it passes the Level 4 tests.
- 5. Add a drop of vanilla essence to take away any taste of thickener.
- 6. Let the mixture rest to allow the gluten to settle, then test again, adding more thickener or more milk as required.

**TOP TIP** 

The key to blending anything is to make sure you remove the stickiness.



Country Range Plain Crème Cake Mix 4 x 3.5kg

Battenburg

### Now, this one will take a little practice, but for a special occasion, it's well worth persevering.

- Make up a batch of Level 4 sponge and split into three.
- 2. Spread the first batch onto a cling film lined baking sheet and set in the freezer. Do not freeze.
- 3. Add red colouring and strawberry flavouring to the second batch and a small amount of green colouring and mint flavouring to the third batch.
- 4. Now pipe two alternate lines of each coloured sponge (green, red, green red) on top of the set sponge with each line measuring 1cm deep and 2cm wide.
- 5. Set in the freezer (without freezing) and then you're ready to carefully roll your battenburg over, so that the two coloured lines end up on top of the other two to create the patten.



## Swiss Roll

This is very similar to the wrap method on page 8. The two elements are the sponge and jam.

#### METHOD

- To make the jam suitable for a Level 4 diet, you need to heat it, blend with milk to take away any stickiness, then put through a sieve to remove any seeds. Allow it to go cold at this stage before whisking in thickener until it passes the Level 4 tests. Then pass through a sieve for a second time.
- 2. You are now ready to create your swiss roll by putting a layer of the Level 4 sponge onto a cling film lined baking tray and setting in the freezer, before adding the jam layer and setting again, then rolling.



These are really simple to create, using the Level 4 sponge and adding some Level 4 jam and cream, or maybe a little coulis. Don't forget to ensure that your cream is thickened and tested for Level 4. Add vanilla essence to taste.

Chocolate Dam Sponge



Here, I made the Level 4 sponge, but using the Country Range Chocolate Crème Cake Mix, as well as the Level 4 jam. I used metal ring moulds for this one.

- 1. Pipe your level 4 sponge mix into a ring mould so that it is around 1cm deep and set in the freezer.
- 2. Pipe a thin layer of jam on top of the set sponge and set again in the freezer.
- 3. Pipe your final layer of sponge on top of the jam layer and this time, freeze rather than just setting.
- Now you can push the finished dessert out of the ring onto your serving plate and allow to defrost before serving.



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