

# Dysphagia

## Diet Awareness Workshop

ZINZAMOMI Japanese Restaurant,  
Tokyo, March 9<sup>th</sup>, 2023



Tokyo Medical and Dental University  
Gender Equality and  
Career Development Division

IFDC

## WORKSHOP INFORMATION

Japan is a pioneer in super-aging society care and has a variety of swallowing food products. In this workshop, we will introduce the traditional Japanese food techniques, that can be used to create a form that aids swallowing, and through actual tasting, participants can understand the importance of assisting people to eat through the workshop, shall we find new worlds of Japanese food culture and share the actual situation of swallowing in each participant's country.

On March 9<sup>th</sup>, the first Dysphagia Diet Awareness Workshop is scheduled to be held. It will be supported by the Female Faculty Promotion Program (FFPP) of Tokyo Medical and Dental University and the International Faculty Development Course (IFDC) and organized by the Maxillofacial Prosthetics team of TMDU. It will be sponsored by a grant, funded by the Initiative for Realizing Diversity in the Research Environment

This workshop will be offered and hosted with a cooperation with Dr. Hagino, a maxillofacial prosthodontist and an owner of ZINZAMOMI Japanese Restaurant.

## WORKSHOP PROGRAM

### 1<sup>ST</sup> SECTION 17:00 – 18:00

- A special lecture to explain about the dysphagia
- Try the commercialized dysphagia diet such as AIT and other food
- Observe Japanese traditional cooking performance

### 2<sup>ND</sup> SECTION 18:00 – 19:00

- Taste the dysphagia diet food that was cooked using the Japanese traditional cooking technique.
- Comment and feedback on the food and make a small presentation about the dysphagia diet in your country.

## WORKSHOP ORGANIZERS



**Dr. Yuka Sumita**  
Principal Organizer  
Tokyo Medical and  
Dental University



**Dr. Ayako Hagino**  
Host & Operator  
ZINZAMOMI  
Japanese Restaurant



**Dr. Mai Murase**  
Lecturer  
Tokyo Medical and  
Dental University



**Dr. Mahmoud Elbashti**  
Moderator  
Tokyo Medical and  
Dental University

Tokyo, March 9<sup>th</sup>, 2023

Dear participants,

Welcome to the 1<sup>st</sup> International Dysphagia diet awareness workshop!

We are honored to be able to offer this workshop, the workshop is granted by the Initiative for Realizing Diversity in the Research Environment and also supported by IFDC and the section of Diversity Inclusion, Tokyo Medical and Dental University.

It is understandable that elderly people and patients with head and neck cancer might have a higher risk of malnutrition. It is important to support the patient, not only by applying the prosthetic treatment, and rehabilitation, but also by supplying a suitable meal.

Through the workshop, shall we find new worlds of Japanese food culture and share the actual situation of swallowing in each participant's country. It can be a great chance to discuss together what we can do from now on in order to support our patient. As one more important mission of us is to create the tighten relationship with each other.

To complete the mission, Dr. HAGINO who is a Japanese traditional restaurant owner and maxillofacial prosthodontist and Dr. MURASE who is a maxillofacial prosthodontist and a nutrition researcher are contributing a lot to managing the workshop. Dr. ELBASHTI did the excellent organizing and Dr. HATTORI and Dr. HARAGUCHI gave us great support.

Please enjoy the workshop activities and take a new forward step together!

Sincerely yours,

A handwritten signature in black ink, consisting of stylized Japanese characters. The characters appear to be '陽' (Yō) and '由香' (Yuka), which are the kanji for the name Yuka Sumita.

Dr. Yuka SUMITA, DDS. PhD

Principal organizer

Associate professor, Department of Advanced prosthodontics,

Graduate school, Tokyo Medical and Dental University (TMDU)

Director, Clinic for maxillofacial prosthetics,

Tokyo Medical and Dental University (TMDU) Hospital

Japanese cuisine is characterized by the use of fresh, high-quality ingredients and a focus on highlighting the natural flavors of each ingredient. It often features a variety of cooking methods, including grilling, simmering, and raw preparations such as sushi and sashimi. The emphasis on presentation and aesthetics is also a key feature, with great attention paid to the visual appeal of each dish. Finally, traditional Japanese cuisine places a strong emphasis on seasonality, with dishes and ingredients chosen to reflect the time of year and the changing seasons.





The unique feature of Zinzamomi's dysphagia diet is that it is not made by reconstituting food mixed in a blender, but is arranged from traditional Japanese cooking methods that make it safe and easy to swallow.



Common type of  
mousse meal

simmered monkfish  
liver and radish



The easiest way to soften it homogeneously is to put it in a blender. However, simply blending with a blender will leave fibers and result in a coarse texture. The straining process eliminates fibers and creates a smoother texture than in a blender.



It is often misunderstood that food is easier to swallow if it is chopped into smaller pieces, but people who have lost tongue movement due to aging have difficulty using their tongues to collect chopped food and send it down their throats, causing it to accumulate in the oral vestibule.

Hidden cuts made in food ingredients to make them easier to form food clumps than chopped food.





Enjoy our signature swallowing  
adjustment meals.





## Hospital Food For head and neck cancer patients

- Causes of dysphagia in patients with HNC
  - Functional impairment before treatment: caused by the tumor itself
  - Impairments due to RT
  - Impairments due to surgeries
  - Impairments due to untreatable HNC tumors
  - Anxiety about the prognosis of HNC
  - Anxiety regarding potential recurrence of HNC
  
- The goal of the nutrition support in the hospital is to optimize a patient's nutrition status and improve outcomes such as wound healing, immune function, and overall quality of life.





## TMDU Hospital meals for HNC patients

### 1<sup>st</sup> step



### 2<sup>nd</sup> Step



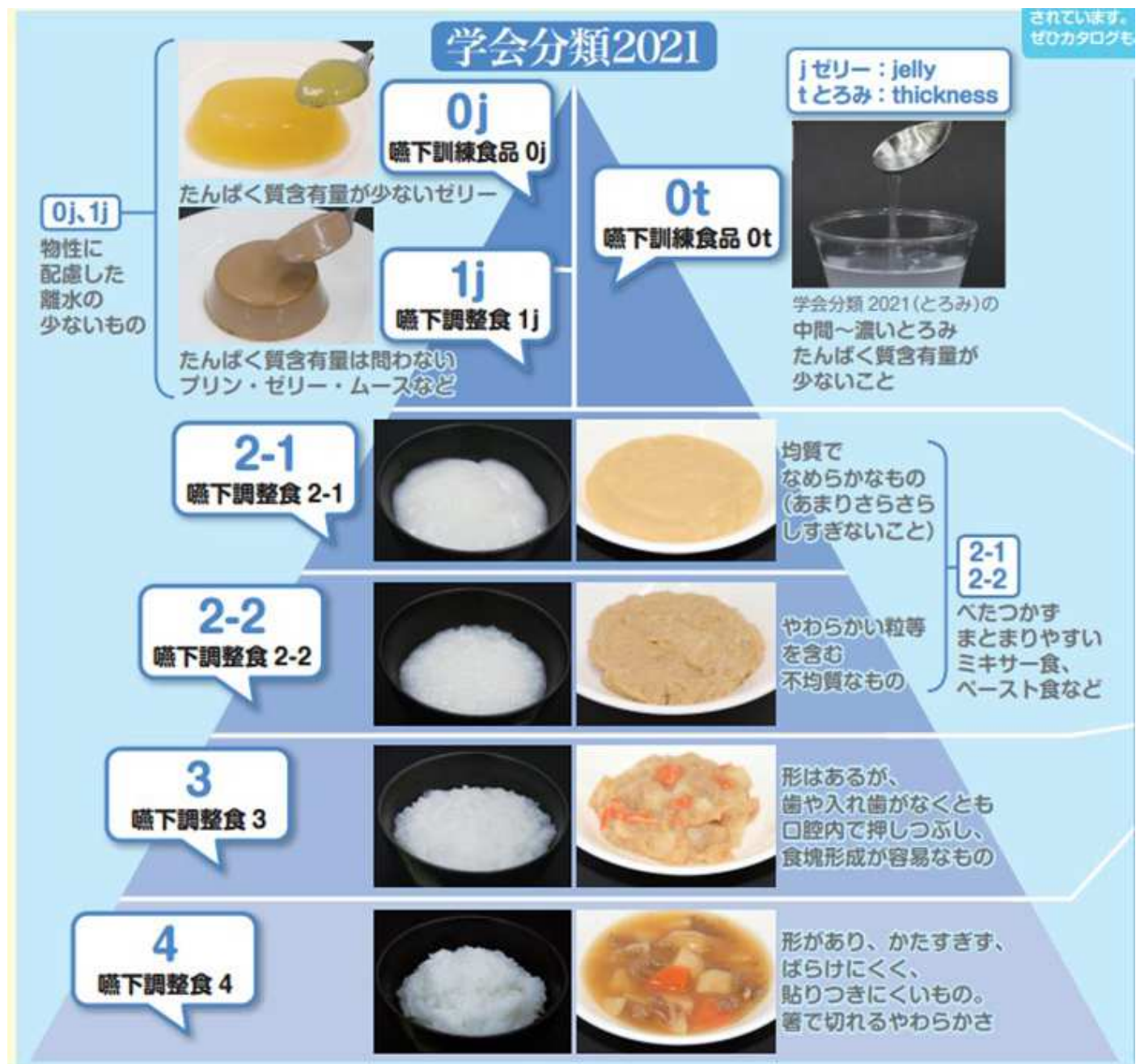
### 3<sup>rd</sup> Step



### Norma meal



# Classification of Dysphagia Diet By Japanese Society of Dysphagia Rehabilitation, 2021



- Japanese Dysphagia Diet 2021 by the JSRD dysphagia diet committee (JDD2021)
- National Dysphagia Diet Task Force: National dysphagia diet, standardization for optimal care, American Dietetic Association, Chicago, 2002.



## Patient's desire to eat their favorite food



- Patients with head and neck cancer treatments cannot eat the same form of food as before because it is too dangerous.



## Enjoy a meal with family and friends!



- Although dysphagia diets are meant to train swallowing function, they must also be enjoyable and satisfy the appetite, in other words, they must be delicious. Factors in deliciousness include sight, smell, touch, sound, taste, and temperature.  
Patient's wish is to eat safely with family and friends even if they have dysphasia.



# Fusion of Washoku and Dysphagia Diet

- “Washoku” is “traditional Japanese cuisine” which refers to individual Japanese food or a set of Japanese dishes. Washoku was registered as a UNESCO Intangible cultural heritage in 2013.

Japanese food cooking methods and ingredient selection require a high level of knowledge and technical skills, and there are many useful techniques for preparing an adjusted dysphagia diet.



**Let's think together about what Japanese food  
can do for HNC patients!**





Jose Rodriguez – Guy's Hospital. London - UK

## Guy's and St Thomas NHS Trust

Five Hospitals serving the community in South London.

24,000 staff.

Per year:

- Inpatients and day cases: 127,000
- Outpatients: 1.47m
- Community contacts: 641,000
- Babies delivered: 6,000+
- Emergency department attendances (A&E): 186,000

NHS clinical income: £2.6bn

### Catering is hugely complex

'Guy's & St Thomas' Catering Department prides itself on providing to you, the Patient, fresh, healthy, seasonal, traceable and sustainable meals. Patient Menus are produced in accordance with the Soil Association guidelines and to the high standards set out by SALSA (Safe and Local Supplier Approval). Our aim is to provide a wide choice of high quality, appetising, well balanced and nourishing meals'.

<https://gstt.mysaffronportal.com>

There are 65 Menus

#### Available Menus



Used at the Cancer Centre:

  
Acute Oncology  
Unit

  
Chemo Village  
Snack Menu





















































































































## Acute Oncology Unit

Each portion contains:					
Description	Energy	Fat	Saturates	Sugars	Salt
Roast Turkey Dinner (L Fib/DF)	458kcal 1930kJ	8.6g	2.6g	11g	1.3g
Chicken Tikka Masala (L Fib)	298kcal 1296kJ	10g	1.9g	7.6g	1.7g
White Rice (L Fib/L Fat)	244kcal 1032kJ	2.2g	0.5g	<0.5g	1.2g
Tuna Bake (FRO)	292kcal 1239kJ	1.9g	0.4g	5.9g	0.43g
Jacket Potato with Beans & Cheese	122kcal 520kJ	1.9g	1.0g	3.7g	0.52g
Quorn & Sweet Potato Tikka Masala (V)	373kcal 1555kJ	10g	2.5g	11g	1.2g
Vegan Sausage Casserole (V)	192kcal 799kJ	7.4g	1.1g	5.5g	1.5g
Cooked Breakfast Vegetarian	423kcal 1770kJ	18g	3.0g	6.7g	2.6g
Baked Beans	81kcal 343kJ	<0.5g	<0.1g	4.8g	0.65g
Scrambled Egg on Toast with Butter	309kcal 1294kJ	17g	6.8g	4.8g	1.0g

Each portion contains:					
Description	Energy	Fat	Saturates	Sugars	Salt
Choc Chip Pudding (L Fib)	300kcal 1256kJ	16g	7.6g	22g	0.71g
Rice Pudding Pot LS/L6 (V,GF)	118kcal 498kJ	2.6g	1.4g	11g	0.18g
Custard Pot	119kcal 499kJ	3.4g	1.9g	14g	0.15g
Chocolate Custard Pot x12	136kcal 572kJ	3.5g	1.8g	17g	0.11g
Natural Yoghurt	71kcal 304kJ	1.3g	0.8g	9.4g	0.20g
Soya Yoghurt (VG,GF)	90kcal 383kJ	2.5g	0.4g	13g	0.08g
Fruit Jelly	141kcal 598kJ	<0.5g	0.1g	32g	<0.01g
Clementine	44kcal 190kJ	<0.5g	<0.1g	10g	<0.01g
Apple	74kcal 312kJ	0.7g	0.2g	17g	<0.01g
Banana	99kcal 423kJ	<0.5g	<0.1g	22g	<0.01g
Cheese & Biscuits (V)	159kcal 664kJ	9.5g	5.5g	<0.5g	0.48g

Each portion contains:					
Description	Energy	Fat	Saturates	Sugars	Salt
Egg Sandwich	304kcal 1271kJ	16g	2.6g	0.0g	0.87g
Tuna Fish Sandwich	0.0kcal 0.0kJ	0.0g	0.0g	0.0g	0.0g
Cheese Sandwich	386kcal 1619kJ	19g	9.6g	1.9g	1.8g
Ham Sandwich	258kcal 1089kJ	5.8g	2.0g	1.8g	1.6g
Egg Salad (V)	94kcal 390kJ	4.4g	0.5g	8.1g	1.0g
Tuna Fish Salad	141kcal 591kJ	4.4g	0.5g	4.7g	1.7g
Ham Salad	420kcal 1745kJ	27g	4.0g	4.0g	1.8g
Tomato & Mozzarella Salad (V)	152kcal 639kJ	9.8g	5.9g	2.6g	0.48g
Ham & Egg Salad	214kcal 894kJ	14g	4.6g	0.5g	1.6g
Nicose Salad	183kcal 765kJ	7.5g	1.8g	3.8g	1.5g
Cheese Salad (V)	428kcal 1678kJ	32g	9.0g	8.7g	0.90g
Cheese Roll	474kcal 2018kJ	30g	9.6g	0.7g	1.0g
Tuna Mayo Roll	328kcal 1384kJ	13g	1.9g	0.0g	0.38g
Ham Roll	248kcal 1049kJ	5.3g	1.6g	0.0g	1.0g
Egg Mayo Roll	345kcal 1441kJ	19g	2.6g	0.5g	0.38g

## Chemo Village Snack Menu

Each portion contains:						Each portion contains:					
Description	Energy	Fat	Saturates	Sugars	Salt	Description	Energy	Fat	Saturates	Sugars	Salt
Egg Sandwich 	304kcal 1271kj	 16g	 2.6g	0.0g	 0.87g	Natural Yoghurt 	71kcal 304kj	 1.3g	 0.8g	 9.4g	 0.20g
Tuna Fish Sandwich 	0.0kcal 0.0kj	0.0g	0.0g	0.0g	0.0g	Rice Pudding Pot L5/L6 (V,GF) 	118kcal 498kj	 2.6g	 1.4g	 11g	 0.18g
Cheese Sandwich 	386kcal 1619kj	 19g	 9.6g	 1.9g	 1.8g	Custard Pot 	119kcal 499kj	 3.4g	 1.9g	 14g	 0.15g
Ham Sandwich 	258kcal 1089kj	 5.8g	 2.0g	 1.8g	 1.6g	Chocolate Custard Pot 	136kcal 572kj	 3.5g	 1.8g	 17g	 0.11g
Egg Salad (V) 	94kcal 390kj	 4.4g	 0.5g	 8.1g	 1.0g	Soya Yoghurt (VG,GF) 	90kcal 383kj	 2.5g	 0.4g	 13g	 0.08g
Tuna Fish Salad 	141kcal 591kj	 4.4g	 0.5g	 4.7g	 1.7g	Fruit Jelly (VG,GF) 	141kcal 598kj	 <0.5g	 0.1g	 32g	 <0.01g
Ham Salad 	420kcal 1745kj	 27g	 4.0g	 4.0g	 1.8g	Fruity Pot 	67kcal 283kj	 <0.5g	 <0.1g	 17g	 <0.01g
Tomato & Mozzarella Salad (V) 	152kcal 635kj	 9.8g	 5.9g	 2.6g	 0.48g	Clementine 	44kcal 190kj	 <0.5g	 <0.1g	 10g	 <0.01g
Ham & Egg Salad 	214kcal 894kj	 14g	 4.6g	 0.6g	 1.0g	Apple 	74kcal 312kj	 0.7g	 0.2g	 17g	 <0.01g
Nicoise Salad 	183kcal 765kj	 7.5g	 1.8g	 3.8g	 1.5g	Banana 	99kcal 423kj	 <0.5g	 <0.1g	 22g	 <0.01g
Cheese Salad (V) 	428kcal 1678kj	 32g	 9.0g	 8.7g	 0.90g	Muffin Cake 	195kcal 811kj	 9.4g	 0.9g	 7.3g	 0.25g
Cheese Roll 	474kcal 2018kj	 30g	 9.6g	 0.7g	 1.0g	Cheese & Biscuits (V) 	159kcal 664kj	 9.5g	 5.5g	 <0.5g	 0.48g
Tuna Mayo Roll 	328kcal 1384kj	 13g	 1.9g	0.0g	 0.38g	Crisps Ready Salted 	160kcal 668kj	 9.4g	 0.8g	 <0.5g	 0.40g
Ham Roll 	248kcal 1049kj	 5.3g	 1.6g	0.0g	 1.0g	Wotsits 	123kcal 512kj	 7.4g	 0.9g	 1.5g	 0.44g
Egg Mayo Roll 	345kcal 1441kj	 19g	 2.6g	 0.6g	 0.38g	Mini Cheddars 	179kcal 747kj	 10g	 4.1g	 1.8g	 0.88g

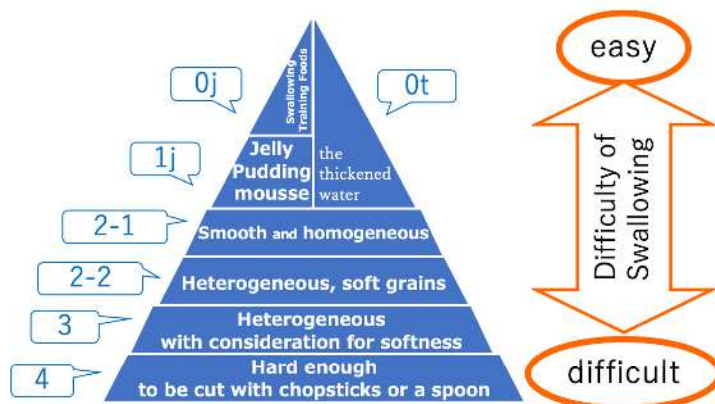


## Swallowing and hospital food in Japan at Tohoku University Hospital

Ryo TAGAINO

### Japanese Dysphagia Diet 2013 by the JSDR dysphagia diet committee

Japanese dysphagia diet is classified according to their properties by the JSDR dysphagia diet committee. The figure below shows the classification of swallowing with increasing difficulty at the top.



The code 0j is homogeneous, adherent, cohesive, firm, with little water separation, and capable of being scooped into slices of jelly.



The code 0j

The code 0t is the thickened water with consideration for adhesion, cohesion, and hardness.

The code 1j is homogeneous jelly, pudding, or mousse.



The code 1

The code 2 is puree, paste, mixer meals, etc.



the code 2

The code 3 is shaped, but designed to easy to crush, form and transfer a bolus, and easy to swallow.

The code 4 is no hardness, no tendency to fall apart, no tendency to stick etc. Its softness can be cut with chopsticks or a spoon.



the code 3, 4

### **For Patients with Mastication Problems**

The cut meals are provided for patients with mastication problems at Tohoku University Hospital. We provide three types cut meals.



General Meals

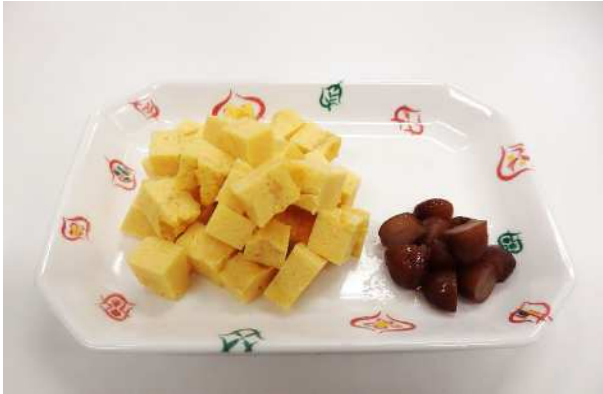


Small cut meals



Medium cut meals  
(About 5 mm square)





Big cut meals  
(Bite size)

## The Center for dysphagia at Tohoku University Hospital

At Tohoku University, “Center for Dysphasia” was opened in July 2019. Comprehensive intervention for the dysphasia patients is provided by a multi-professional team including the Department of Otolaryngology, Head and Neck Surgery, the Department of Physical Medicine and Rehabilitation, the Department of Dentistry, the Department of Pharmacy, the Department of Nursing, the Dietitian Office, and the Dental Hygiene Office. And we choose the dysphagia diet for each patient with the dysphagia.



The conference of the center for dysphagia

## Nursing food available in the general market

In Japan, there are many nursing care foods available in a wide variety of flavors and ease of eating. They are retort-packaged, easy to prepare, and can be bought at general markets. Inpatients are provided with meals tailored to their individual needs. However, after discharge from the hospital, patients need to prepare their own meals. Therefore, we explain this type of nursing care food and show patients how to try it while they are in hospital.

**容易にかめる** 【全6品】  
具材の形を残しながら、スプーンなどでかんたんにつまめるくらいにやわらかく調理しています。

**おかず 和**  
おからと野菜の野菜煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**おかず 洋**  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ

**舌でつぶせる** 【全21品】  
細かな具材を舌でつぶせるくらいにやわらかく調理し、とろみをつけて食べやすく仕上げています。

**やわらかおかず 和**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**やわらかおかず 洋**  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ

**なめらか野菜**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**なめらかおかず**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**カップタイプ**  
カップのまじりけで召喚できます。おからと野菜の煮込み、おからと野菜の煮込み

**歯ぐきでつぶせる** 【全10品】  
歯ぐきでつぶせる具材を舌でつぶせるくらいにやわらかく調理し、とろみをつけて食べやすく仕上げています。

**おかず 和**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**おかず 洋**  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ  
おからと野菜のハンバーグ

**舌でつぶせる**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**なめらか野菜**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**なめらかおかず**  
おからと野菜の煮込み  
おからと野菜の煮込み  
おからと野菜の煮込み

**カップタイプ**  
カップのまじりけで召喚できます。おからと野菜の煮込み、おからと野菜の煮込み

The Nursing Food produced by kewpie.



## Report of the actual state of swallowing and hospital food

Prof. Balendra Pratap Singh

King George's Medical University, Lucknow, India

In India, dysphagia research is generally being done from medical institutions by doctors and few from speech-language pathologist/dietitians etc. Report from private sector/clinics are lacking. There is strong need of research on food for dysphagia required with updated position statement on the basis of recent evidences with support from funding agencies like Department of Science and Technology and the Indian Council of Medical Research.

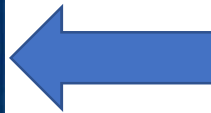
Most of the research centres on dysphagia are located in metropolitan cities and there is need to set up across India in other cities with quality workforce of dedicated staffs with the expertise to treat, manage, and rehabilitate the person with swallowing disorders irrespective of age, gender, race, or condition. There are vast differences in food culture, socio-economic differences among Indian populations. So, high quality research with less bias are required in India to offer solutions for coming aging and dependent population to lead healthy quality of life.

Dysphagia diet used in India are hospital feed, home-made feed, commercial feed, clear liquid diet (Half feed). Essential food groups to be included in Ryles tube feed are cereals, pulses, milk, vegetables & fruits, fat and sugar. Ryles tube (RT) feed is a nursing procedure to provide nutrition to those people who are either unable to obtain nutrition by mouth or are not in a state to swallow the food properly.

**Home-made feed** can be prepared at home, while closely monitoring the composition of amount of food products involved, nutrient needs of patients and the calories, fat and protein supplied should be in accordance to the patient need. Food items selected for RT making, generally include milk, milk powder, sattu, daal, sugar, oil, nuts, salt, chicken soup, fish soup, vegetable soup, egg, fruit juice, coconut water etc.

**Hospital feed diet** contain 1990 kcal calories and 70.65 g protein in 1600 ml (count for a day) per patient. Amount of 1600 ml per day RT feed is distributed as 4 packets of 400 ml amount per patient at morning and evening time. Total amount of 1600 ml feed for a patient contain raw weight of 220g of Roti, 60g of pulses, 200g of vegetables, 400g milk, 20g oil, 120g banana and 50g dry milk. These food items in their given amount are soaked for 30 min then churned in churning and sieved twice. The prepared amount is then packed in 400 ml packets for the distribution. (figure attached with tag fixed over packet for children RT diet)

## Process of preparing RT Diet



**Commercial feed:** Most commercial feeds contain calorie of 1.0 kcal/ml while higher energy versions contain 1.5 kcal/ml. These are generally available in fiber free and fiber enriched forms. These are nutritionally complete but should be modified according to patients need by expert dietician.



Time of interval between each feed: Amount of RT feed and time interval between each feed is decided according to patient's food tolerance and nutritional requirement. Feeding intervals between each RT feed is decided as per the amount.

### Example of daily food for elder person in India:





## **DIET IN THE SPANISH (MADRID REGION, SERMAS Madrid Regional Health Service) HOSPITALS**

### **Dr. Pedro Molinero Mourelle - The Dysphagia Diet Awareness Workshop**

The most common types of diets within a hospital are the following;

#### **Basal diet**

It is the most common diet, it is the diet that is supplied to the patient who does not have any pathology associated with food, who can eat anything. This diet contains approximately 2,200 kcal and meets the nutritional needs of a patient without any type of dietary alteration.

#### **Liquid diet**

This diet is usually made up of various liquids, infusions and juices. They are also called tolerance diets, aimed at those patients who undergo any type of surgical intervention, as well as any patient who has been withdrawn from ordinary food, substituting it for serums and after improvement, they return to a normal diet and are beginning to tolerate it. the food. Due to its low caloric intake, it is usually compensated with fluid therapy, until the patient tolerates a basal diet.

#### **Semi-liquid diet**

It is a diet similar to the previous one, the tolerance process consists of providing food to the patient and assessing its evolution, adding semi-solid foods such as yogurts, soups, milk...

#### **Bland diet**

Soft diets are very similar to the basal diets in calories and nutrients, the fundamental difference is in the food and the way it is cooked. Food is intended to be soft and easily digestible so that the tolerance process is effective.

### **Astringent diet**

It is a type of diet focused on patients with gastrointestinal problems that promote easy digestion and avoid diarrhea. It should not contain residues, low in fiber and is made up of foods such as white rice, chicken, cooked fruits, bread, etc.

### **Turmix diet**

In a diet mainly focused on patients with impaired swallowing ability, it is usually diets based on purees, yogurts and soft fruit. It is vitally important that they never include two different textures to avoid choking.

### **Low sodium diet**

They are diets with strict control of this material, for patients usually with renal impairment.

Special diet by nasogastric or enteral tube. This type of feeding is indicated for patients who cannot eat food normally or independently. Enteral preparations for tube feeding are used according to hospital protocols and pharmacological guidelines.

Hypocaloric diet. These diets, also called D2, have a caloric intake of between 1,500 / 2,000 kcal. They are usually aimed at diabetic or obese patients.

### **Mealtimes are approximately as follows:**

Breakfast: from 08:30 a.m. to 09:00 a.m.

Lunch: from 12:45 p.m. to 1:20 p.m.

Snack: from 4:30 p.m. to 5:00 p.m.

Dinner: from 7:30 p.m. to 8:00 p.m.

## **DYSPHAGIA AND THE HOSPITAL FOOD SUPPLIED IN INDIA.**

Dysphagia (difficulty swallowing) can be caused due to pharyngitis, tonsillitis, oral cancer, blockage in the throat and a variety of reasons. Dysphagia can cause depression, lowered self -esteem, lost wages, poor social performance, and increasing health risks like aspiration pneumonia etc. It can be just as challenging to treat the mental aspects of this disorder as it is to address the physical symptoms. Treatment for dysphagia depends on the cause, symptoms, and type of swallowing problems and it includes:

- Speech and language therapy to help people recover their swallowing with special exercises and techniques;
- Changing the consistency of food and liquids to make them safer to swallow; and
- Employing other forms of feeding – such as tube feeding through the nose (Naso-gastric tube feeding or jejunal feeding etc).

The greater problem for some patients is eating enough calories. The whole process of eating simply becomes too difficult and too tiring. However, calorie and protein intake can be increased by fortifying the foods the patient does eat. Food can be ground/diced into 1/4-inch pieces, crushed potato, tomato, pudding, ice-cream and Lemonade and Oatmeal can be eaten.

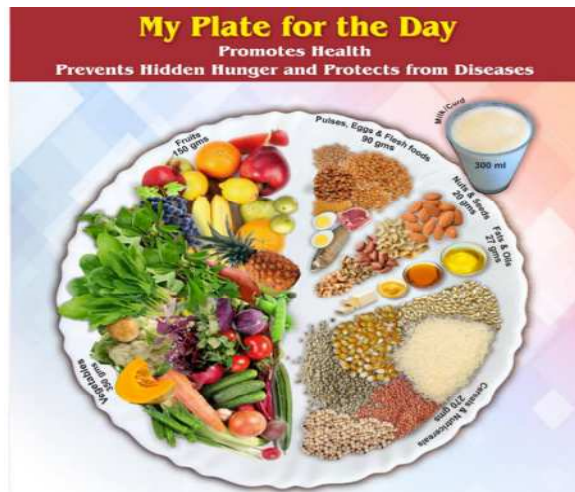


Blended or pureed food.



Dietary management of dysphagia aims to:

1. Maximise health and well being
2. Minimise the risk of under-nutrition and dehydration
3. Minimise risk of aspiration pneumonia
4. Maintain oral nutrition



**A typical balanced diet for a Day**

*(ICMR-National Institute of Nutrition)*



Variety of spices - cinnamon, cloves, garlic, ginger, basil, oregano, nutmeg, bay leaf, allspice, curry leaves, fenugreek seeds/leaves, turmeric, ginseng, mustard, cumin seeds, ginger,

coriander etc.

add to the taste & flavour even in the blended diets

1.



**OATS WITH MILK PORRIDGE**

2.



**WATER MELON JUICE. OR ANY JUICES**

3.



## **MASHED PARBOILED RICE**

4.



## **YELLOW DAL WITH MASHED VEGETABLES**

5.



## **MASHED SAMBAR IDLY**

6.



## **MILK SHAKES**



7.



**RAGI MALT IN MILK**

8.



**SPINACH AND CORIANDER SOUP OF THICK AND THIN CONSISTENCY**

**BEETROOT AND CARROT SOUP OF THICK CONSISTENCY**

9.



**MASHED GREEN PEAS VEGETABLE CURRY OR ANY OTHER**

10.



**MASHED EGG OR FISH CURRY OR CHICKEN STEWS WITH TOLERABLE SPICES.**

**Commercial available nutrition shakes and food.**



High Protein  
32 Nutrients  
Complete Nutrition  
400 g







# The Management of Swallowing Food in National Taiwan University Hospital

## Chen-Ping Lin

The Department of Dietetics in National Taiwan University Hospital provided several recipes and diet for the patients with dysphagia, and our Dental Prosthodontic department had been cooperating not only with them but the doctors from ENT dept., Rehabilitation dept., radiologist, neurologist, nutritionist, speech therapist and occupational therapist.

We classified the patient with dysphagia into 3 classifications: (1) easily choked (2) can only partially swallow (3) cannot swallow. There is 10–12% elders in our community without any serious systemic diseases was still suffered from dysphagia. However, these elders can still eat per-mouth and sometimes choked accidentally and lead to aspiration pneumonia even death. In addition to elders, patients with brain damage, shock, degenerative neural diseases and head and neck tumor (ex: NPC patient) are also in the high risk of dysphagia.

Thus, in our hospital, we train these patients' neuromuscular system and reconstruct their dentition with prostheses. On the other side, our nutritionists prepare the customized diets based on their chewing and swallowing abilities, with reference to the guideline from the International Dysphagia Diet Standardization Initiative (IDDSI).

IDDSI classified the foods and drinks based on their different texture and consistency into level 3–7 (foods) and degree 0–4 (drinks).



### Foods: level 3–7

Level 3: full liquid diet

Level 4: paste food

Level 5: finely crushed and soggy food

Level 6: soft and mouthful food

Level 7EC: easy-to-chew food

Level 7: prototype food

### Drinks: degree 0–4

Level 0: thin consistency

Level 1: very low dr. consistency

Level 2: low degree consistency

Level 3: medium dr. consistency

Level 4: high degree consistency

# Dysphagia Workshop Presentation

**Dr Gunjan Srivastava**  
Professor  
Department of Prosthodontics  
Institute of Dental Sciences  
Siksha O Anusandhan deemed to be University  
Bhubaneswar, India

## Dysphagia

- Dysphagia is **defined** as difficulty in transferring food from the mouth to the stomach.
- A **nasogastric tube or Ryles tube** is a narrow-bore tube passed into the stomach via the nose. It is used for short- or medium-term nutritional support.



Patient with Ryles tube in place

## Reasons for dysphagia

- Nasogastric feeding is commonly encountered in older patients (defined as over 65 years old) owing to dysphagia and malnutrition.
- Dysphagia in older people is very often multifactorial. Causes may be neurological, such as stroke, dementia, and delirium, or mechanical.
- In addition, poor dentition, reduced moisture in the oral cavity and age-related decline in function of masticatory muscles can compound any swallowing difficulty



Dysphagia food in  
hospital



Dysphagia food available in market  
in India

## Ryles tube feeding of Patient



Ryles Tube used to deliver nutritional support and medications to patients who are unable to swallow or are unable to meet their nutritional requirements by mouth

Thank you!!



## Soft diets in Bhutan...

In the Bhutanese hospitals, mostly nasogastric feeding is used for patients who cannot eat normal diet. The NG feeding is prepared by the dietitians using mostly the powdered ingredients or with the help of grinders. Porridge is also one option.



Bhutan doesn't have much food items manufactured within the country but there are few products available in the urban area for patients who have difficulty eating normal food. Most of the products are powdered which can be used in different types of dishes. M



Most commonly people are fed with home made soft diet that are prepared in 2 ways.

1<sup>st</sup> method is by boiling the ingredients and crushing them or grinding them.



2<sup>nd</sup> method is by pressure-cooking the ingredients in a pressure cooker until the ingredients become soft which doesn't need chewing.



Most common dish that is feed to such patients are different kinds rice porridge which is very famous dish in Bhutan for festivals.



For nutrient supplements, the products are imported from other countries.



## Rice porridge with minced meat and vegetable



Originating from Southeastern China, Rice porridge is a typical breakfast of Thai. It is soft enough for elders and children, as well as undergone surgery patients.

To cook the porridge, the rice starch and water ratio determines its viscosity of 1:7 to 1:10 are used, depending on how difficult the patient can compensate. Soft-boiled eggs and soft minced meat help the patient cope well with good sources of protein. The set meal can be served with seasonal fruit.



Figures show how porridge look with different ratio of starch and water.



As for the patient's requires a watery diet, this Nutri bag is given through the NG tube. Only if patients were able to start a soft diet then we stop giving Nutri bag.



# Dysphagia Diet in Sudan

Here are some examples of dysphagia diet used in Sudan.

- Dysphagia diet 1: Thin liquids; (eg, Milk, yogurt, fruit juice, coffee, tea)
- Dysphagia diet 2: Nectar-thick liquids; (eg, Lentil soup, mashed meat and vegetables soup)



- Dysphagia diet 3: Honey-thick liquids (eg, Madida which contain milk and some cereal)



- Dysphagia diet 4: porridge like foods (eg, porridge, mashed bananas, cooked beans)



- Dysphagia diet 5: Chewy foods (eg, Gurasa)



- Dysphagia diet 6: Foods that fall apart (eg, rice)

