

# AR331 THE HUNGRY MANIKIN<sup>®</sup> - PAEDIATRIC NASOGASTRIC FEEDING TRAINER Instruction Manual





Thank you for purchasing this AR331 Hungry Manikin<sup>®</sup>.

This manikin was designed by nutrition nurses at Birmingham Children's Hospital to demonstrate to parents/carers the technique for inserting nasogastric and gastrostomy devices in children.

The Hungry Manikin<sup>®</sup> has been significantly improved so that liquids can be introduced into the stomach. The transparent manikin cover is now removable and, by means of a simple connector, the stomach can be removed for cleaning. This simple to use simulator helps identify the stages of placement, ensuring that the nasogastric device is passed safely and correctly.

This child manikin enables parents/carers to visualise the correct positioning of nasogastric and gastrostomy devices and also practise the associated techniques.

Families have reported that The Hungry Manikin<sup>®</sup> gave them invaluable practice and increased their confidence and understanding.

Please read this instruction manual carefully and retain it for future reference.

#### Skills

- Measurement, placement and securement of nasogastric tube
- Insertion of gastrostomy device
- As the manikin accepts fluids, training in the following procedures is now possible:
  - Aspiration of the stomach for confirming correct tube placement
  - Measuring pH (acidity/alkalinity) of stomach aspirate
  - Enteral feeding via nasogastric or gastrostomy tubes
  - Administration of liquid based medicines

#### **Features**

- Movable epiglottis to demonstrate swallowing
- Transparent body allowing trainees to observe the tube being passed
- Divided nasal septum
- Simulated gastrostomy opening
- Representation of lungs and oesophagus

#### **Safety and Precautions**

Do not lie the manikin completely flat - liquids may run back up the oesophagus and leak. Always attach the foam head support first.

During use, fill the stomach only to the maximum line as indicated on the manikin. Filling above this line will cause the stomach to leak.

Do not store the stomach with any liquids inside, especially acidic liquids. Prolonged contact with acidic liquids will cause accelerated wear.

The stomach is a disposable item and will need to be replaced periodically.

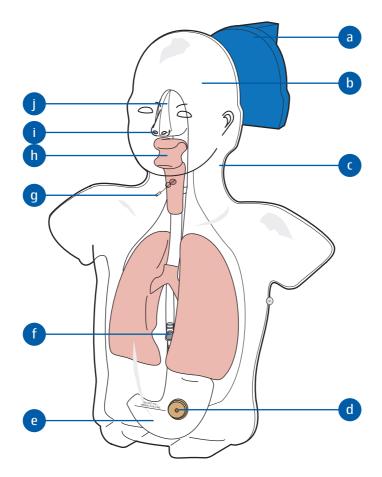
This manikin is designed to facilitate training in the passing of nasogastric tubes and gastrostomy insertion. The procedures demonstrated in this manual serve as a guide only. Local policies will determine the type of nasogastric feeding devices to use.

Please treat the manikin with the same care you would a patient.

#### Contents

Parts - Supplied With	4 5
Before Use - Positioning the Foam Head Support - Inserting Liquid for Aspiration/pH Measurement	7 7
During Use - Using the Moveable Epiglottis to Simulate Swallowing - Introducing Liquids - Use of Nasal Bridles and Tape - Gastrostomy Procedures	9 9 9 11
After Use - Remove Devices and Empty Liquid from the Stomach - Cleaning and Replacing the Stomach - Cleaning the Transparent Manikin Cover and Base - Storage and Transportation	13 13 17 19

#### **Parts**





#### **S331/16 FOAM HEAD SUPPORT**

Transparent, removable manikin cover

Rear base

Simulated gastrostomy opening

#### S331/8 REMOVABLE, REPLACEABLE STOMACH

Stomach quick release connector

Epiglottis cord

Tongue/throat/oesophagus

Nostrils

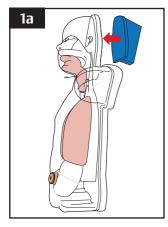
Septum

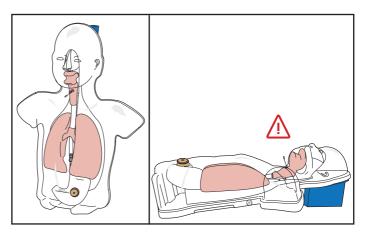
#### Supplied With S331/1 RIGID CARRYING CASE

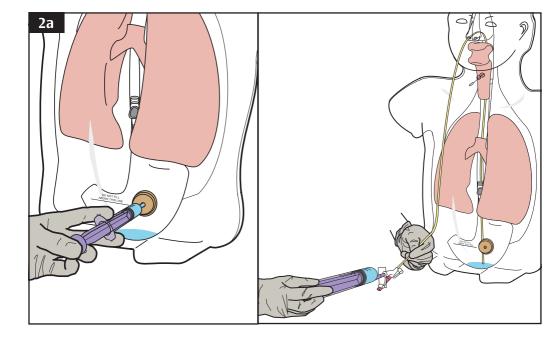
If you require replacement parts please contact our Sales Department, quoting codes where applicable.

Scan the QR code to access the product video. https://youtu.be/xjqXZhbaWIs

# **Before Use**







## Positioning the Foam Head Support

Ensure the work area is clean and dry.

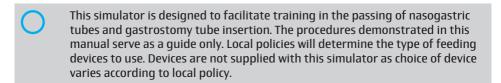
The manikin may be used upright or lying down on a stable, flat surface.



To position the foam head support, align the flat side to the top of the head on the rear of the white base, and push it in firmly.



Do not lie the manikin down without the foam head support in position as liquids may run back up the oesophagus and cause leakage.



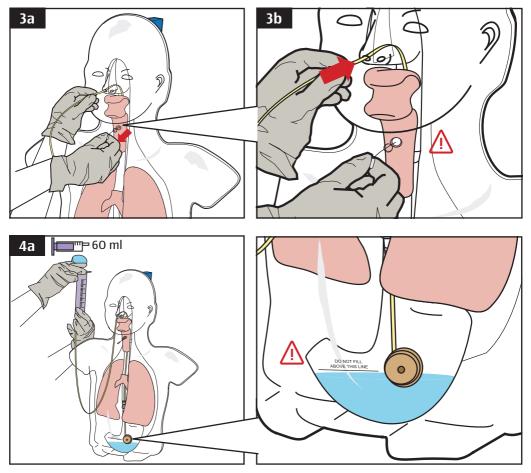
#### Inserting Liquid for Aspiration/pH Measurement

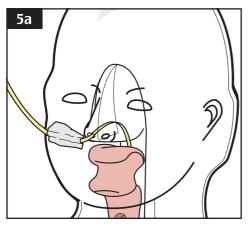
2a Liquid may be introduced into the stomach directly to practice aspiration and/ or testing pH (alkalinity/acidity). This should be injected into the stomach via the simulated gastrostomy opening.

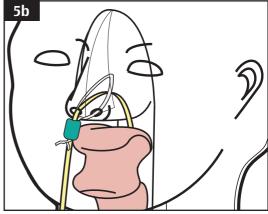


The stomach accepts up to 100 ml of liquid. Do not fill the stomach above the maximum fill line as indicated.

# During Use: Nasogastric Procedures

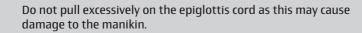






## Using the Moveable Epiglottis to Simulate Swallowing

- **3a** During insertion of a nasogastric tube, pull the epiglottis cord to open the epiglottis which simulates movement of the epiglottis during swallowing.
- **3b** Pull the epiglottis cord forward, stopping when the **white stopper is visible**. Continue to feed the nasogastric tube down the oesophagus and into the stomach, repeating the simulated epiglottis movement as **3a** above.



Size 8 Fr Nasogastric and Size 12 Fg Ryles tubes should be used.

#### Introducing Liquids

**4a** During use, a range of nasogastric procedures may be simulated as liquids can be introduced into the stomach.

Liquids may be introduced via bolus feeding or be connected to a feeding pump.

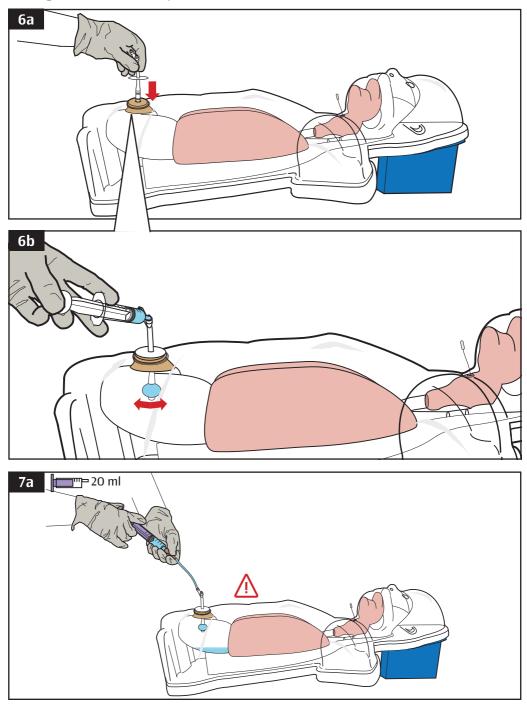


The stomach accepts up to 100 ml of liquid. Do not fill the stomach above the maximum fill line as indicated.

#### Use of Nasal Bridles and Tape

- **5a** Tape may be secured to the manikin's face to keep the nasogastric tube in place.
- **5b** A nasal bridle (not supplied) can also be introduced into the manikin via the divided septum.

# During Use: Gastrostomy Procedures



#### Insertion of Gastrostomy Devices



A gastrostomy device is not supplied with this manikin as choice of device varies according to local policy.

6a

A range of gastrostomy procedures may be simulated using the manikin. Gastrostomy devices up to **size 14 Fr** may be inserted into the stomach via the simulated gastrostomy opening.

Liquids can then be introduced into the stomach.



If required, lubricate the device with water before insertion.

**6b** This manikin can accept gastrostomy devices equipped with inflatable balloons.

#### Introducing Liquids

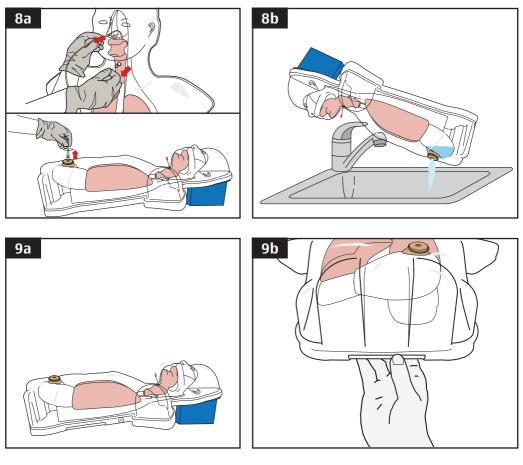


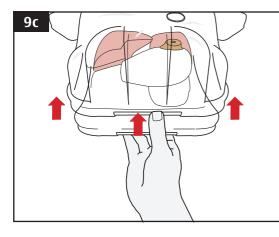
Liquids may be introduced into the stomach via a gastrostomy device.

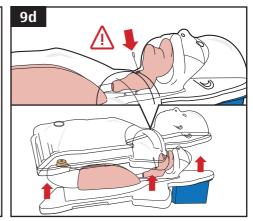


The stomach accepts up to 100 ml of liquid. Do not fill the stomach above the maximum fill line as indicated.

# After Use







#### Remove Devices and Empty Liquid from the Stomach

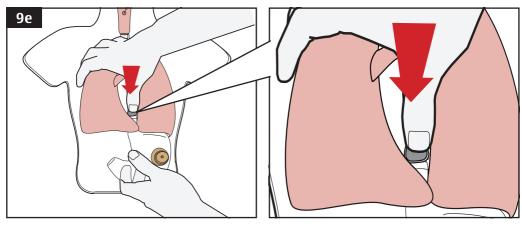
- 8a After use, remove all nasogastric and gastrostomy devices from the manikin as well as nasal bridles and tape if used.
- **8b** Hold and support the manikin face down over a sink or container to empty liquid from the stomach.

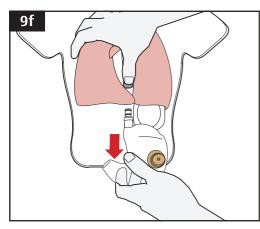
# Cleaning and Replacing the Stomach

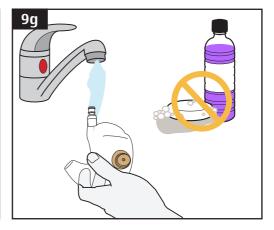
$\triangle$	The stomach must be cleaned and dried after each use and before storage.
	Do not store the stomach with any liquids inside, especially acidic liquids. Prolonged contact with acidic liquids will cause accelerated wear.
0	To maintain optimal performance of the manikin, the stomach will need to be replaced periodically as it is a disposable item. To replace the stomach follow these instructions.
9a	Ensure excess liquid has been emptied from the stomach and all devices have been removed from the manikin as in <b>Steps 8a</b> and <b>8b</b> above.
	Ensure the foam head support is attached and lie the manikin on a stable, flat surface.
9b	Remove the transparent manikin cover by inserting your thumb into the indent at the base of the manikin, with your fingers behind.
9c	Push up with your thumb to release the transparent cover from the white manikin base.
9d	Gently lift the transparent manikin cover away from the manikin.
$\bigwedge$	Take care to ensure that the epiglottis cord does not catch on the transparent manikin cover during removal.

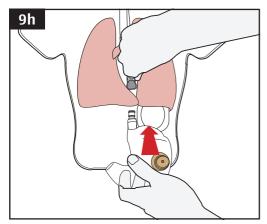
Continues, please see next page...

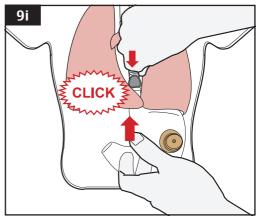
# After Use (Continued)











# Cleaning and Replacing the Stomach (Continued)

9e

To remove the stomach, hold it with one hand and press the grey button on the quick release stomach connector, located in-between the lungs.

# **9f** Keeping the button depressed, gently pull the stomach down and slightly upwards to remove it from the base.



The stomach may now be cleaned using **warm water only** or **Milton Sterilising Fluid.** 



Do not use soap, detergents or any other chemical cleaners to clean the stomach.

# **9h** To replace the clean stomach, or **fit a new stomach**, make sure the gastrostomy opening is facing up and the stomach connector is on the top left.

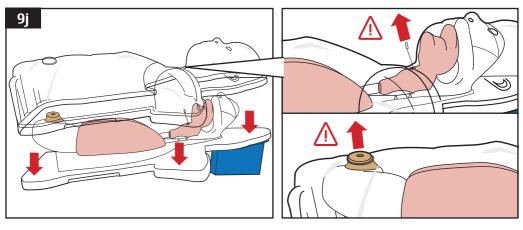
Gently slide the stomach into its home position on the base. Guide the tube into the quick release connector with the other hand.

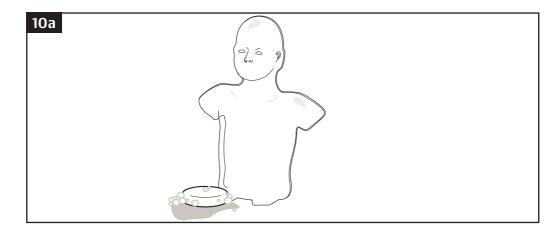
9i Align and push the white stomach connector firmly into the quick release connector.

Both must **click** into place, confirming successful placement of the stomach.

Continues, please see next page...

# Settings





# Cleaning and Replacing the Stomach (Continued)



Once the stomach has been fitted, replace the transparent manikin cover by aligning it with the base and push into place.

The manikin is now ready for storage or use.



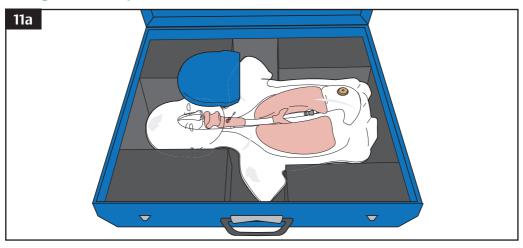
Remember to make sure that the epiglottis cord and simulated gastrostomy opening fit neatly through the transparent manikin cover.

## Cleaning the Transparent Manikin Cover and Base

10a

The transparent manikin cover may be wiped with a soft sponge using a mild detergent solution.

# Storage and Transportation





# Using the Supplied Rigid Carrying Case



After use, or before transportation, the manikin should be placed in the supplied **Rigid Carrying Case.** 

The manikin must be placed back into the case as supplied, on its **base** with the **foam head support placed flat side up**, with the **vertical support down alongside the manikin's face**.



Do not store or transport the manikin with liquid inside.

#### Storage

12a

Store the manikin in a dry place.



Do not store the manikin near heat or where it may experience extremes in temperature and humidity.

#### 2 Year Guarantee



All products manufactured by Adam,Rouilly are covered by our full 2 Year Guarantee. This guarantee applies to models which have been used correctly and covers durability and functionality.

# Adam, Rouilly

As part of our policy of continual product development, the specification of products may alter without prior notice.

Adam,Rouilly has over 100 year's experience in providing quality medical models and simulators.

Should you require any further information please contact our Sales Department who will be pleased to help with your enquiry.

Adam,Rouilly Limited
Castle Road
Eurolink Business Park
Sittingbourne
Kent
United Kingdom
ME10 3AG

T: +44(0)1795 471378 F: +44(0)1795 479787 E: sales@adam-rouilly.co.uk www.adam-rouilly.co.uk

©Copyright 2020