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1023317/ 1018817



3B SCIENTIFIC® NURSING MANIKIN

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> CONTENTS

I. DESCRIPTION OF THE NURSING MANIKIN P10N, P10/1D, P11/1, P11/1D	3
1. Structure and basic functions	3
2. Scope of delivery	4
3. Assembly	7
4. Training modules	8
4a. Injection pads and wound inserts	8
4b. Stump insert	8
4c. Genital inserts.....	8
4d. Dental prosthesis.....	8
II. TRAINING OPTIONS	9
5. Basic care	9
1. Lifting, carrying, repositioning and lying positions	9
2. Bed Care of the Patient.....	9
3. Mobilization	9
4. Washing (full body washes and intimate care).....	9
5. Hair care.....	9
6. Oral care.....	9
7. Eye care.....	9
8. Ear care.....	9
9. Nasal care	9
6. Treatment care	10
1. Prophylactic measures	10
2. Physiotherapy	10
3. Resuscitation (mouth-to-mouth/nose-to-mouth).....	11
4. Diabetic Foot Syndrome (DFS).....	11
5. Bandages.....	11
6. Irrigation	12
7. Enemas – for nursing manikin PRO (P10N, P10/1D) only	12
8. Catheterization – for nursing manikin PRO (P10N, P10/1D) only	12
9. Injections and infusions.....	12
10. Enterostomy	12
7. Care	14
Contact information	14

3B SCIENTIFIC® NURSING MANIKIN

➤ I. DESCRIPTION OF THE NURSING MANIKIN

1. Structure and basic functions

The 3B Scientific® Nursing Manikin is a medical training simulator specifically designed for nursing training with a wide range of practical exercises that include first aid and emergency situations. The external structure and movement of the nursing manikin is modeled on the human body. The nursing manikin was developed for practical, hands-on use. Apart from the high-quality, metal joints and the mobile connections on the torso and head, it is made entirely of plastic, making it very easy to take care of and long-lasting. The possible movements and postures closely correspond to those of a human patient. The nursing manikin can remain in a seated position – even in bed – without having to be supported. Thanks to the new construction, the head, lower jaw and all body components can be moved and adjusted naturally. The 3B Scientific® nursing manikin's sturdy design limits the risk of breakage if handled incorrectly by accident. The hands and feet of the nursing manikin are made of a soft, flexible synthetic material, with individually formed fingers and toes. The scalp is also made of a soft, flexible plastic material, but contains a hard plastic skull, so the soft and hard parts of the head coincide for the most part with reality.

The 3B Scientific® nursing manikin is available in four versions:

1. Nursing manikin PRO (P10N), item number 1025295
2. Nursing manikin BASIC (P11/1), item number 1018817
3. Nursing manikin PRO (P10/1D) Dark skin, item number 1023316
4. Nursing manikin BASIC (P11/1D) Dark skin, item number 1023317

The PRO nursing manikin (P10N, P10/1D) contains all internal training organs for basic care and treatment care to be performed. The nursing manikin BASIC (P11/1, P11/1D) is suited essentially to basic care, because it contains no inner organs. The nursing manikin has a natural size of approx. 174 cm (69 in). The nursing manikin PRO weighs approx. 15.5 kg (34.2 lbs.), and the nursing manikin BASIC approx. 14 kg (30.9 lbs.).

The torso of the 3B Scientific® nursing manikin consists of two mobile sections that are screwed together:

- a) The upper section of the PRO nursing manikin contains the lungs, heart and stomach in addition to the trachea and esophagus, and
- b) the lower section has genital organs, and the nursing manikin PRO also comes with the intestines, a bladder and internal genital organs.

Both the BASIC and PRO models come with interchangeable external genital organs. The pairs of upper and lower limbs are attached to the torso with easy-to-use push-in screw joints. The arms and legs can be connected and taken apart at the joints. The head can also be removed from the torso. The upper and lower jaw contain a removable dental prosthesis.

Each nursing manikin comes with one interchangeable female and one interchangeable male genital insert. Injection pads are located on the upper arms, upper thighs and buttocks. There are also two inserts with visible wounds included, which can be placed on the upper arm and thigh. In the PRO nursing manikin, the rectum and the intestine, the urethra and the bladder, and the esophagus and the stomach are connected with specially developed push-in plugs with right-handed union nuts. They are totally sealed and easy to use.

The internal organs have the following approximate capacity:

1. Intestine part: 1200 ml (40.58 fl oz)
2. Bladder: 220 ml (40.58 fl oz)
3. Stomach: 360 ml (40.58 fl oz)
4. Lungs: 1,800 ml (40.58 fl oz)

Each nursing manikin has a serial number on the inside of the back in the upper part of the torso. Please always quote the serial number when ordering spare parts or if you contact us to ask questions.

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2. Scope of delivery

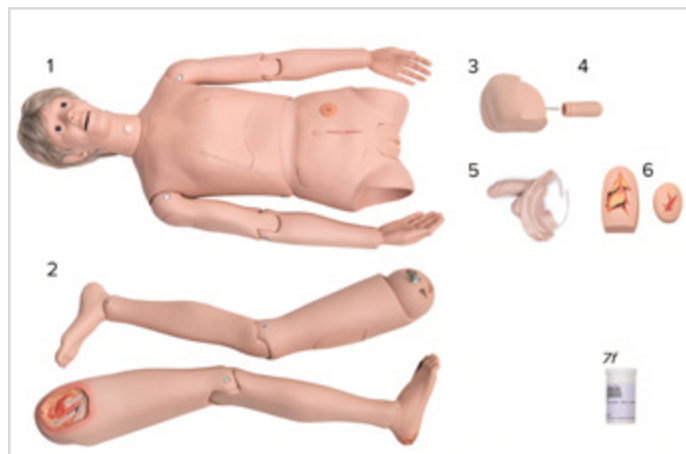
For shipping reasons, the nursing manikins are delivered partially disassembled in a cardboard box. The following table lists all parts supplied for the respective PRO and BASIC nursing manikins.

Nursing manikin PRO

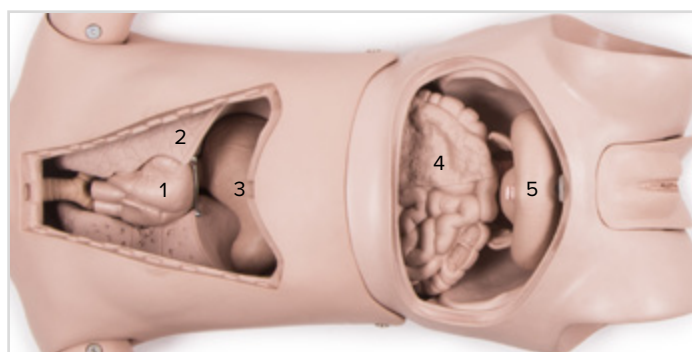


1. Upper body with arms, head, trachea and esophagus, and the following parts already inserted:
 - 1a. Dental prosthesis
 - 1b. Four injection pads, one each on the upper arm, one on the hip and one on the buttocks
 - 1c. Chest cover
 - 1d. Abdominal cover including two Allen keys for mounting on the inside of the abdomen
 - 1e. Female reproductive organs*
 - 1f. Internal organs:
 - Heart
 - Lungs
 - Stomach
 - Intestine insert
 - Bladder
2. Left and right leg with
 - 2a. Two injection pads, one on each thigh
3. Leg stump
4. Small endostoma
5. Male reproductive organs*
6. Tow wound inserts, one each for upper arm and thigh
7. Working set
 - 7a. Disposable catheter (Nelaton catheter Fr14)
 - 7b. Intestinal tube (rectal catheter Fr28)
 - 7c. Vaseline
 - 7d. Two 20-ml disposable syringes with Vaseline
 - 7e. Spare seals and screws
 - 7f. Talcum powder
 - 7g. Gastric tube (duodenal tube Fr18)
 - 7h. Contact gel, 250 ml

Nursing manikin BASIC



1. Upper body with arms, head, trachea and esophagus, and the following parts already inserted:
 - 1a. Dental prosthesis
 - 1b. Four injection pads, one on each upper arm, one on the hip and one on the buttocks
 - 1c. Chest cover
 - 1d. Abdominal wall with two turnscrews on the inside
 - 1e. Female reproductive organs*
2. Two legs with
 - 2a. Injection pads, one on each thigh
3. Leg stump
4. Small endostoma
5. Male reproductive organs*
6. Tow wound inserts, one each for upper arm and thigh
7. Working set
 - 7f. Talcum powder



Internal organs of the PRO nursing manikin

1. Heart
2. Lung
3. Stomach
4. Intestine insert
5. Bladder

* Note: Please note the genital inserts with the PRO and BASIC nursing manikins are different. The genital inserts with the BASIC nursing manikin show only the external reproductive organs. The PRO nursing manikin also shows the urethra, rectum and the internal reproductive organs.

Fig. 3

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2. Assembly

A few preparatory steps are required to ensure the manikin will be fully operational. Please follow the number sequence. For the BASIC nursing manikin, you can skip steps II, V and VII, as these only apply to the PRO nursing manikin .

I. Unpacking

- First remove all individual parts from the shipping box and lay them down as shown on page 4
- Make sure the torso is lying on the back
- Then remove the chest and abdominal wall

II. Removing internal organs – only for nursing manikin PRO

a) Chest area

- First remove the heart
- Then unscrew the stomach from the esophagus by turning the cap nut counterclockwise and remove it as well. See Fig. 4
- Squeeze the lung and pull it out at the wider end of the chest opening. See arrow in Fig. 5
- Pull the lung away from the trachea so that the plastic tubes are pulled out of the lung

b) Pelvic area

- First, loosen the union nut connecting the bladder to the urethra by turning it counterclockwise and remove the bladder. See Fig. 6
- Then, push the uterus with the ovaries upwards and to the side. See Fig. 7
- At the same time, loosen the union nut between the casing insert and the rectum by turning it counterclockwise and remove the casing insert. See Fig. 7



Fig. 4



Fig. 5



Fig. 6



Fig. 7

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III. Removing the genital insert

- Pull the two fastening straps of the female genital insert over the black knobs
- Pull the genital insert outwards. See Fig. 8
- In the PRO nursing manikin, pull the uterus with the ovaries and the rectum out through the genital insert opening



Fig. 8

IV. Attaching the lower limbs

- First lay down the two lower limbs
- Then remove the knurled nut from the threaded pin. See Fig. 9
- The washer located on the threaded pin is not removed. See Fig. 9
- Guide the upper leg with the movable grub screw through the hole. See Fig. 9 (indicated)
- Finally, tighten the knurled nut on the inside

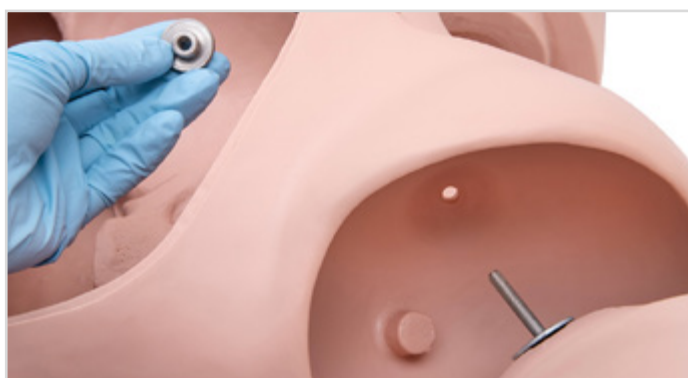


Fig. 9

V. Inserting the internal organs in the chest cavity – only for nursing manikin PRO

- Hold the esophagus and trachea out of the chest cavity with one hand and insert the compressed lung into the chest cavity with the other hand. See Fig. 10
- Then lubricate the two thin plastic tubes with the contact lubrication provided and insert them into the openings provided in the lungs until they are completely inside the lungs. See Fig. 11
- Then guide the stomach in its anatomically correct position to the transparent esophagus, and tighten it by turning the cap nut clockwise. See Fig. 4 on page 5
- Insert the heart. See Fig. 3 on page 4
- Finally, close the upper part of the torso with the chest cover



Fig. 10



Fig. 11

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VI. Inserting the genital inserts

- Place the genital insert from the outside into the large opening of the lower torso section. See Fig. 12
- Put the upper fastening band through the slit on the pubic bone at the same time
- Once the genital insert has been inserted and is correctly in place, pull both fastening straps and place each hole over the knob



Fig. 12

VII. Inserting the internal organs into the pelvic cavity – only for nursing manikin PRO

- First, guide the thread of the intestinal insert to the end of the rectum of the genital insert and screw it in place. See Fig. 13
- Then insert the bladder with the bladder tip pointing upwards and connect it to the urethra by turning the union nut clockwise. See Fig. 14



Fig. 13



Fig. 14

VIII. Inserting the abdominal wall

- Attach the supplied small end stoma bowel piece to the inside of the abdominal wall
- In the PRO nursing manikin, there is no connection from the end stoma bowel piece to the bowel insert and rectum
- Finally insert the abdominal wall

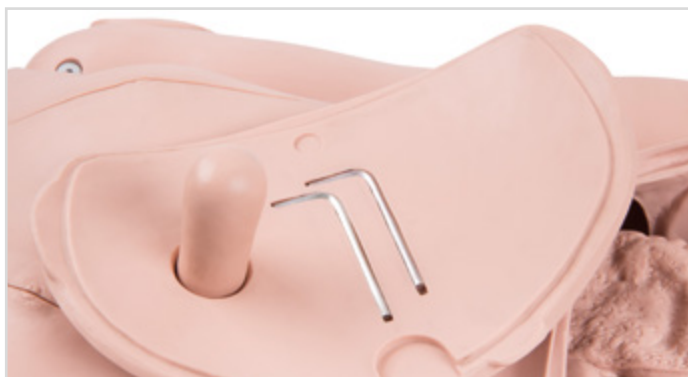


Fig. 15

The nursing manikin is now operational and can be used fully for training.

3B SCIENTIFIC® NURSING MANIKIN

4. Training modules

Once successfully assembled, the nursing manikin can be adapted to the required purpose for training exercises.

A. Injection pads and wound inserts

The injection pads on the upper arm and thigh can be replaced with wound inserts, which can be used, for example, to practice wound care. This will be discussed in more detail in the section on practical exercises. It is recommended to squeeze the pads together from the sides as shown in Figure 16, to make it easier to take them out and put them in.



Fig. 16

B. Stump insert

The leg stump can only be used on the right leg. To do this, the calf must first be unscrewed at the knee joint, as shown in Fig. 17:

- Use the Allen key* on both opposite screws.
- Turn one of the screws to the left while holding the other screw to prevent it from turning as well.

The leg stump (as shown in Fig. 18) can then be inserted at the knee joint:

- Insert the metal rod into the hole provided for this purpose until it is sitting firmly in the joint.
- No screws are needed for assembly.



Fig. 17

C. Genital inserts

The nursing manikin has a female and a male genital insert which can be replaced. See steps 2 and 5 in the assembly chapter.

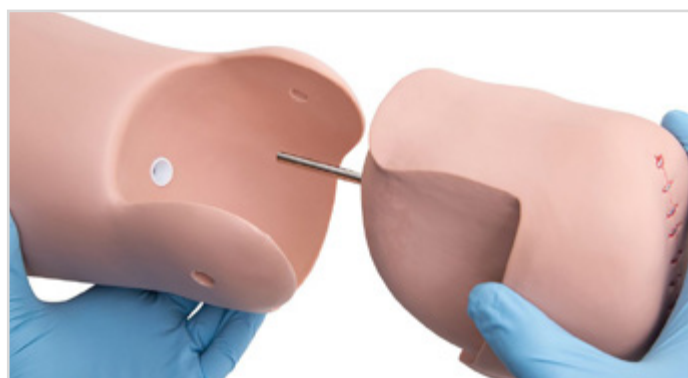


Fig. 18

D. Dental prosthesis

The nursing manikin has a dental prosthesis. See Fig. 19, which consists of an upper and a lower partial dental prosthesis. The partial dental prostheses can be easily removed and reinserted, e.g., for practicing care of the dental prosthesis. This can be done, for example, to practice caring for a dental prosthesis. See page 9, 6. oral care. Oral care.



Fig. 19

*Note: Both Allen keys supplied can be used. They are located on the inside of the abdominal wall. See Fig. 15 on page 7.

➤ II. TRAINING OPTIONS

The most important training options with the nursing manikin are covered below. Before carrying out an exercise, please pay attention to the notes that are numbered in superscript and explained on page 13.

5. Basic care

For many seriously ill patients and those in need of assistance, daily personal hygiene must be performed by nursing staff. To ensure that quick and thorough personal hygiene can be carried out correctly, the 3B Scientific® nursing manikin offers many features. There are lots of procedures required to make it easier for the nursing staff to lift and carry patients and to put them to bed. All activities that come under basic care can be performed with both the PRO nursing manikin and the BASIC nursing manikin.

1. Lifting, carrying, repositioning and lying positions

Lifting, carrying and repositioning patients need to be done as gently as possible, and often places physical strain on the nursing staff. It is important to practice special procedures so the above can be done correctly. This can be done easily thanks to the almost natural mobility of the nursing manikin. All procedures for moving patients, lifting them out of bed, as well as carrying and repositioning them can be learned. The nursing manikin can be set upright and sat down without any additional support. It is then possible to practice helping a patient to get up from a chair or to sit up straight in bed. It is also possible to demonstrate some special lying positions for patients.

2. Bed Care of the Patient

All techniques which involve helping the patient into bed, helping him change position, as well as helping the patient dress and undress can be practiced with the nursing manikin.

3. Mobilization

All mobilization measures can be demonstrated on the nursing manikin.

4. Washing (whole body washing with intimate care)

The nursing staff must perform a full bed bath for bedridden patients. All the sequence of steps can be practiced. Intimate care for both men and women can be practiced thanks to the interchangeable male and female genital inserts.¹

5. Hair care

The hair can be combed and washed.¹ Drying the hair using a hair dryer can also be practiced.²

6. Oral care

Oral and dental care can be demonstrated on the care manikin. The removable partial dental prostheses in the upper and lower jaw can be used to learn how to take care of dental prostheses.¹

7. Eye care

Since the nursing manikin has inset eyes and relatively soft eyelids, eye care can be performed in a lifelike manner.¹

8. Ear care

Natural replicated auricles with an approximately 2-cm long, ear canal closed on the inside offer an opportunity to carry out ear care and irrigation.¹

9. Nasal care

There is a connection to the pharyngeal cavity through the nasal entrances, so nursing procedures can be carried out here.¹

3B SCIENTIFIC® NURSING MANIKIN

6. Treatment care

Many exercises that come under treatment care can be performed with both the PRO nursing manikin and the BASIC nursing manikin. Exercises that can only be performed with the PRO nursing manikin are indicated by the wording "- only for PRO nursing manikin" in the following pages.

1. Prophylactic measures

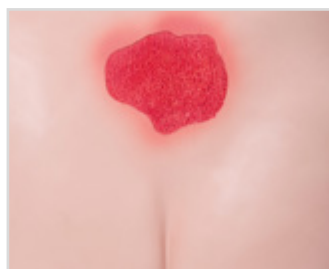
The nursing manikin can be used to prepare the nursing staff thoroughly for prophylactic measures and to carry them out.

1a. Bedsores (decubitus)

When patients are lying down, the entire body weight rests on the tissue of the back and legs, while means that protruding parts of the body particularly exposed to pressure are at risk. To prevent bedsores, the nursing manikin can be used to practice various ways of positioning the patient, such as the prone, supine or side position, as well as repositioning the patient and the correct use of aids.^{1,3}

To learn and practice wound care in a nursing context, the decubitus stages that have been demonstrated in clinical practice are presented with their appropriate grade:

Decubitus **grade 2** in the region of the sacrum (os sacrum). A partial loss of the skin can be seen here: the epidermis shows damage that extends into the corium. Superficial pressure damage can manifest itself clinically with the formation of blisters and skin abrasions.



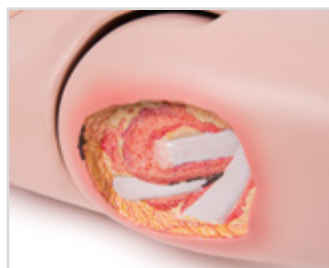
Grade 2

In the area of the heel – a protrusion in the rear part of the foot, the contour of which is formed by the heel bone (calcaneus) – a **grade 3** is shown: a loss of all skin layers with damage to the subcutaneous tissue as far as necrosis can be seen here as black discoloration in the wound area.



Grade 3

At the greater trochanter, there is a pronounced **grade 4** decubitus ulcer: destruction of all skin layers and also of the muscle fascia. Underlying muscles and bony parts are also affected, which can become damaged and necrotic. Supporting structures such as tendons, ligaments or joint components may also be affected.



Grade 4

1b. Contracture prophylaxis

A wide variety of measures can be learned, such as:

- Positioning the hip and knee joints in a 180-degree extension, alternating with slight flexion through to a knee roll.
- Positioning the shoulder joint alternately in a 30-to-90-degree abduction.
- The extension position or 90-degree flexion of the elbow joint.
- Laying a blanket roll with internal and external rotation of the foot.
- Measures to prevent drop-foot / ankle contracture.

1c. Pneumonia prophylaxis

Pneumonia is an additional complication that is dreaded and must be prevented by all means. The repositioning necessary for this as well as rubdowns of the patient can be practiced.¹

1d. Thrombosis prophylaxis

Since the legs are particularly at risk of thrombosis, learning how to put on compression stockings and how to wrap the legs can be taught.

1e. Thrush and parotitis prophylaxis

The most important procedures in oral care can be practiced.¹

2. Physiotherapy

It should be noted here that during thermal therapy, the nursing manikin may never be exposed to temperatures above 25° C (77° F). No restrictions are necessary for dry/cold applications. Moist wraps and packs should not exceed 25°C (77° F). Mustard oil, mustard flour, alcohol, mineral mud or similar should not be used. If practicing with cataplasms, it is recommended to use flaxseed meal, as this does not harm the 3B nursing manikin.

2a. Inhalations with different devices

Inhalation therapy involves the use of various devices such as bronchitis inhalation devices, aerosol and inhalation equipment. The positioning of the patient, the correct positioning of the devices and the correct application of face masks and mouthpieces can be practiced.⁴

2b. Oxygen supply

The nursing manikin is suitable for practicing various ways of administering oxygen, such as applying an oxygen mask, a nasal catheter, inhalation masks, etc.

3B SCIENTIFIC® NURSING MANIKIN

3. Resuscitation (mouth-to-mouth/mouth-to-nose)

The nursing manikin offers very good opportunities for practicing various methods of administering resuscitation.⁵

3a. Mouth-to-nose

The entire technique of mouth-to-nose ventilation can be practiced with the nursing manikin. This also includes the preparatory measures for mouth-to-nose ventilation such as correct positioning, clearing the airway of vomit and removing dentures.^{5,6}

3b. Mouth-to-mouth

All necessary measures of mouth-to-mouth resuscitation including the preparatory measures (see 3a. mouth-to-nose) can be learned and practiced with the nursing manikin. Ventilation with the aid of a tube is also possible.^{5,6}

3c. Big valve mask and other devices

All procedures for artificial respiration with the resuscitation bag can be practiced.

3d. Other methods

Using the tracheal opening of the nursing manikin, tracheal cannulas can be inserted and take care of, a tracheal catheter can be placed, and tracheal aspiration can be practiced.^{5,7}

4. Diabetic foot syndrome (DFS)

As a result of diabetes mellitus, defects and pressure points can occur in the foot area, the forefoot, the ball of the foot, the big and little toes being particularly affected. On the right foot, the big toe shows gangrenous changes, which have already extended to the metatarsal area on the dorsum of the foot. On the sole of the foot (plantar), a so-called mal perforans can be seen. This is a neuropathic ulcer, which is also one of the typical clinical symptoms of diabetic foot syndrome.



5. Bandages

Applying a bandage requires a certain amount of skill, and the training manikin offers plenty of practical exercises. Applying different bandages professionally can be practiced on all parts of the body.⁸

Dressing techniques on the stump of the leg can also be practiced. To do this, the stump insert supplied must first be inserted into the knee joint (see page 8, chapter “B. stump insert”).

A surgical staple suture is shown on the abdominal wall, which can be used for wound closure after abdominal surgical procedures.



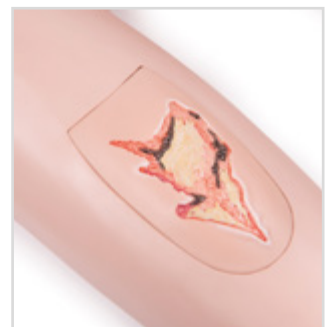
The injection pads on the upper arm and thigh can be exchanged for inserts with wound displays (see page 9, chapter “A. Injection pads or wound inserts”).

- The upper arm insert shows a laceration (vulnus lacerum) that can be caused by force with a blunt instrument. The skin and the underlying soft tissue are torn open. Typically, a laceration shows torn and irregular wound edges.
- The thigh insert shows an abrasion (vulnus abrasum), which can occur when the skin is abraded by frictional forces, e.g., as a result of falling. An abrasion that is only superficial is referred to as erosion, while a deeper abrasion is called excoriation.

Wound care and management procedures can be learned and practiced on all the wounds shown, such as wound cleansing by irrigation with disinfecting solutions¹, wound covering (compresses), and applying and changing dressings.⁸



Upper arm insert with laceration



Femoral insert with abrasion

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6. Irrigation

Body-temperature liquids with or without medicinal additives are used for irrigations.¹

6a. Eye irrigations

Thanks to the elastic eyelids, eye irrigation can be practiced on the mannikin eyes. It is also possible to practice the necessary procedures for applying ointments to the eyes or instilling drops.¹

6b. Ear irrigation

The external auditory canal is replicated but closed at the end. So, ear irrigation as well as the insertion of medication can be practiced.¹ After these exercises, the ear canal must be dabbed dry with absorbent cotton.

6c. Gastric lavage – only for nursing manikin PRO

For a gastric lavage, it is best to use the supplied gastric tube (Fr18 duodenal tube). Before inserting the tube, lubricate it with the contact gel supplied to achieve good lubrication.⁹ The stomach has a capacity of approx. 360 ml (12.17 fl oz) and is connected to the esophagus by means of a screw cap.^{1 10}

6d. Bowel irrigation – only for nursing manikin PRO

The bowel tube supplied (Fr28 rectal catheter) is recommended for this purpose. It should be greased with Vaseline before insertion so it can slide easily through the plastic valve of the rectum. When irrigating the PRO nursing manikin, sufficient liquid¹ must be used to completely fill the bowel section (capacity approx. 1,200 ml (40.58 fl oz)). Only then can sufficient liquid flow back through the inserted tube. When the bowel section is full, the foregut can be pulled out and reinserted without liquid escaping.^{11 10}

6e. Bladder irrigation – only for nursing manikin PRO

It is best to use an irrigation catheter (size approx. Fr16) for bladder irrigation.¹² The catheter must first be coated with a thin layer of contact gel, supplied, to ensure perfect lubrication so the catheter slides into the plastic valve of the bladder easily. The bladder has a capacity of approx. 220 ml (7.44 fl oz). The filling opening on the bladder must be closed during these exercises. Bladder irrigation can be performed with both the female and male genital inserts. The valve in the bladder should be coated with contact gel or Vaseline before and after each use.^{1 10}

6f. Vaginal irrigation – only for nursing manikin PRO

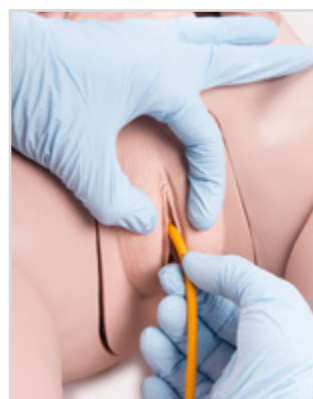
An approx. 15 cm (5.9 in) long plastic tube, which connects the female genital insert to the uterus shows the vagina in the PRO nursing manikin.^{13 10}

7. Enemas – only for nursing manikin PRO

Enemas can be practiced effectively on the nursing manikin. A lamellar valve acts as a sphincter, preventing fluid from leaking when the rectal tube is inserted and once it has been removed from the anus. At the end of the rectum, there is a section of intestine with a capacity of approx. 1,200 ml (40.58 fl oz). The same amount of liquid should be used for all exercises, as not all of the liquid filled in runs back out when the PRO nursing manikin is lying on its side. (see also 6d. bowel irrigation, page 12). For enema treatments, the supplied disposable intestinal tube (Fr28 rectal catheter) is recommended, which must be lubricated with Vaseline before insertion. For enema treatment, a cleansing enema, a high enema and a return-flow enema can be practiced. It is also possible to administer disposable intestinal lavages.^{1 14}

8. Catheterization – only for nursing manikin PRO

Since the nursing manikin has interchangeable male and female genital inserts, all the necessary procedures can be carried out for catheterization for urine collection and can be practiced for both men and women. It is best to use the Nelaton Fr14 catheter supplied for this purpose. Before the exercise, the bladder is filled with water using a syringe (capacity approx. 220 ml (7.44 fl oz)). The filling orifice must not be open during catheterization. If the fluid does not flow out of the bladder when the catheter is correctly positioned, you can start the flow of fluid by raising the PRO nursing manikin or applying slight pressure to the bladder. When doing so, close the drainage opening with your finger.^{1 15}



9. Injections and infusions

Equipped with injection cushions on the thighs, the upper arms and buttocks, the nursing manikin is ideally suited for practicing injections and infusions.¹



9a. Subcutaneous injections

On the injection pads in the upper arms and thighs, you can practice the subcutaneous injection technique as well as pre- and post-treatment of the application sites.

9b. Intramuscular injections

For practicing intramuscular injections, two injection pads on the buttocks are provided, one for ventrogluteal and the other for intragluteal injection.^{1 15}

9c. Subcutaneous infusions

When carrying out exercises, please note that the injection pads only have a limited absorption volume for liquid (possibly squeeze out in between).

10. Enterostomy

The abdominal wall is provided with an anus praeter opening. On the inside, there is an approx. 8-cm-long (3.15 in) section of plastic intestine which is closed at the end and has no connection with the actual intestine (see also page 7, Fig. 15). All procedures associated with the care of the artificial bowel opening can be practiced on the manikin.

3B SCIENTIFIC® NURSING MANIKIN

Notes:

- ¹ Please use only water for training and remove all liquid residue after each exercise. (For more information, see “7. Care”, General Notes, page 14.)
- ² Caution: When doing so, please select the lowest heat level of the hair dryer and be careful not to concentrate for too long and too closely on one spot.
- ³ When practicing, please replace medical powder with the talcum powder provided.
- ⁴ Caution: All training may only be performed with the apparatus switched off.
- ⁵ Note for carrying out the exercise on the PRO nursing manikin: The lungs inflate when handled correctly. So, please ensure that the stomach is connected to the esophagus and the drainage opening of the lungs is closed before the exercise.
- ⁶ After mouth-to-mouth/mouth-to-nose resuscitation, the nursing manikin can be disinfected with a skin disinfectant.
- ⁷ All required tubes, catheters and cannulas are covered with a thin coating of gel with the supplied contact gel before carrying out exercises.
- ⁸ Plaster, Unnas’s paste or similar should be avoided. Sticking plaster residues can be removed with white spirit.
- ⁹ The throat and mouth area of the PRO nursing manikin should also be gelled from time to time. (For more information, see “7. Care”, General Notes, page 14.)
- ¹⁰ After the exercises for “6. Irrigation”, the nursing manikin and all its parts must be cleaned and dried before being reassembled. Liquid residues must be removed from the organs, and the filling openings can be used for draining (intestinal section and bladder). Any last remnants of liquid can be removed by tapping until all drops have come out.
- ¹¹ If fluid runs out of the anus when the intestinal tube is not inserted, open the blue screw cap and refill the rectal valve with Vaseline (approx. 2 ml) using the disposable syringe provided. The total volume of the valve is 5 ml.
- ¹² The soft rubber indwelling catheters are not well suited for the exercises because they are sometimes difficult to insert.
- ¹³ Since the vagina is not equipped with valves or drainage openings, liquid may leak out next to the inserted vaginal applicator tube. After each exercise, the water remaining in the vagina must be removed through the screw cap on the genital insert.
- ¹⁴ After the exercise, the intestinal section is unscrewed from the rectum and any liquid residue is released. The PRO nursing manikin cannot be reassembled until all parts have dried thoroughly.
- ¹⁵ After the exercises, the genital inserts and the bladder must be cleaned and dried thoroughly before they are reinserted in the PRO nursing manikin (see also “6e. Bladder irrigation”, page 12.)
- ¹⁶ Only water may be used for injections and infusions. The injection pads consist of a plastic cover and an absorbent foam pad inserted into this cover. They can be removed from the recesses in the manikin body for cleaning or squeezing. The foam pads are removed through the slit at the bottom of the plastic sleeve. After the exercises, all injection pads must be thoroughly cleaned and dried before reinsertion. Powdering the plastic sleeves with talcum powder will make it easier for it to be re-inserted. As the injection pads wear out, they must be replaced from time to time. They can be ordered as spare parts.

3B SCIENTIFIC® NURSING MANIKIN

7. Care

Regular care

Have the device regularly maintained to ensure the 3B Scientific® manikin can be used safely for years and will stay clean. Due to its special design, this is very easy. Since all manikin parts and internal exercise organs are made of plastic, the surfaces can be cleaned regularly with water and, if necessary, with a weak soap solution. After treatment with soap solution, the nursing manikin must be rinsed thoroughly with clean water and wiped dry. In any case, make sure that the manikin parts that have been wiped are left in the air afterwards to dry. Only a completely dry nursing manikin may be reassembled. Before reassembling the individual parts, apply a very thin layer of lubricant or the contact gel supplied with the PRO nursing manikin to the joints and joint surfaces where the plastic parts could rub against each other. It is also recommended to apply a moderate amount of lubricant/contact gel to the nasal and pharyngeal area for better lubrication and applying lubricant occasionally to the threaded pins on the joints ensures they will move freely, so this should also be done regularly. The valves installed in the PRO nursing manikin should be cleaned regularly with Vaseline. When the bladder is

unscrewed, a valve consisting of plastic flaps becomes visible, which can be rubbed with Vaseline using the little finger. To care for the valve on the anus and rectum, insert an intestinal tube smeared with Vaseline from time to time.

General care instructions

Any adhesive plaster residue on the plastic surface can be removed with white spirit. Only make marks on the nursing manikin with a pencil. Ink from ballpoint pens, felt-tip pens or similar cannot be removed or are very difficult to remove. If working with liquids, only pure water may be used. Medication, solutions or tinctures must be avoided. Liquid residue must be removed after each exercise. Openings with screw caps have been installed for this in the head (underside), neck, lungs, intestinal section and bladder. The stomach is emptied through the opening to the esophagus. More special care instructions can be found in the description with the corresponding exercises.

> CONTACT INFORMATION



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