





# WHY offer a maternity line?

In 2018, there were 367,374 births recorded in Spain which represents a natality rate of 7.86%.

More and more women are deciding to become mothers at a later age. According to INE (Spanish National Statistics Institute), they wish to have an average of 2 children meaning their age is becoming older and older. In 2018, the average age of women having their first child was 32; a woman's body can go through very different changes than at a younger age.

The Orliman Maternity line supports all those women who decide to engage in prevention during such a time as well as those with certain pathologies who seek help through orthotics adapted to their needs.

### 2018 MATERNITY IN FIGURES

60 women between the ages of 20 and 40. Important potential!

5.7 million babies born in Europe. And nearly as many mothers!

**29.1** was the average age of firsttime mothers. Our potential customers!

the number of children per women. That's about 2 opportunities to care a patient!

### STATISTICS ON PATHOLOGY FREQUENCY

"All women experience some musculoskeletal discomfort during pregnancy"

"The incidence of stretch marks in the abdominal area in women that do not take preventive measures is between **55%** and **95%** of all cases."



"During pregnancy, the possibility of developing vein disorders and chronic venous insufficiency (CVI) increases up to 500%"



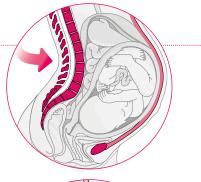
"Approximately 50% of all pregnant women experience backpain during pregnancy."



"The prevalence of lower back and pelvic pain during pregnancy can reach 89.9%"

"It is estimated that 75% of all pregnant women experience swelling in the ankles or feet."

A LITTLE
ANATOMY
(bone, muscular, circulatory and skin)



### BONES

Women's bone structure changes due to a need to bear the **biomechanical stress** of carrying a growing foetus. There is an increase in lumbar lordosis, ligamentous laxity in the lumbar spine and increased mobility of the sacroiliac joints and pubic symphysis.

### **SKIN**

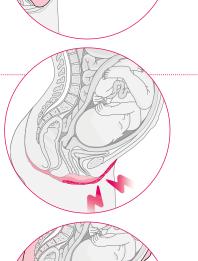
One very common response to hormonal changes is **hyperpigmentation** in several areas of the body, especially the abdominal wall. Plus, the extra stress causes reddish lines (stretch marks) to appear which later turn white.



The muscles that hold up the uterus make great effort as it grows. A pulling feeling is common in the lower belly (sometimes similar to cramps) or sharp pain due to the **strain on the abdominal muscles**.

### **CIRCULATION**

The volume of blood increases **30-50%** in order to carry more oxygen and nutrients. On the other hand, the increased venous pressure in the lower limbs causes less venous return to the heart.





### **DID YOU KNOW...?**



About 7.5% of babies born following assisted reproduction are from women aged 30 to 34 whereas the percentage increases to 11% in women aged 40 to 44.



Pregnant women are more prone to breaking bones due to a hormone called relaxin. This hormone softens joints so the hips and pelvis can open up for birth.



Medical-grade girdles help pregnant women carry the weight better and maintain good posture. Plus, they can help prevent injuries in the final phase of pregnancy when mothers feel more active.



According to a study by the University of Iowa Department of Orthopedics (USA), 70% of pregnant women suffer permanent changes in their lower limbs from fluid retention and the increased weight during pregnancy where they grow 2 to 10 mm, having to wear shoes that are a half or whole size bigger.



1 out of 3 women gives birth by caesarean section. This number has tripled in the last 10 years due to a delay in the average age at which they have their first child, the increased rate of obesity and diabetes and the higher number of multiple pregnancies.



Starting at 6 weeks after childbirth, there is noticeable recovery of the abdominal area and that is when some moderate exercise can be done such as walking at a light pace.



The uterus is capable of increasing its normal size by up to 500 times and it will grow even more in cases of multiple pregnancy. The uterus goes back to the normal size 2 weeks after having a baby as part of a process known as uterus involution. which can sometimes cause painful contractions.





3 billion times in the 9 months between conception and birth. This means an average weight gain of approximately 15 kg for the mother.





men suffer from sciatica due to the compression of the sciatic nerves as they leave the sacrum since they are in a forced position.

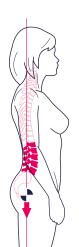
Varicose veins increase in size due to pregnancy hormones. They often disappear afterwards, but can be avoided by using compression stockings, not wearing tight clothing and lifting the feet when sitting.

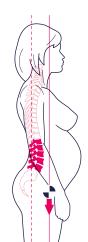
### PHYSIOLOGICAL CHANGES

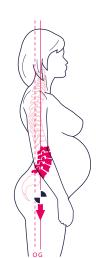
### FOR LUMBAR VERTEBRAE

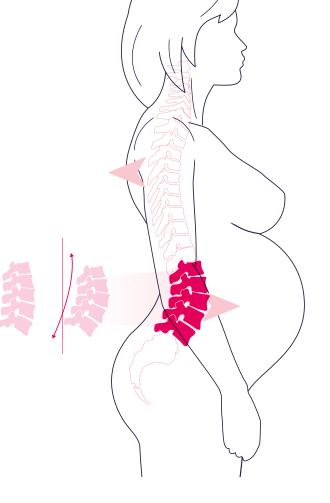
### **PATHOLOGY**

- During pregnancy, women develop postural changes which are necessary to maintain balance in a vertical position.
- The load on the vertebrae and intervertebral discs is higher due to the increasing weight of the foetus.
- There's an increase in disc symptoms and/or pain from the vertebral joints as well as pain with or without radiation in the legs.











PRE-PARTUM





#### **EFFECTS**

- Helps with lumbar support and stability.
- Protects the spinal column.
- Reduces vertebral, pubic and pelvic pressure.
- Relieves pain.







### Back support brace





LÁTEX ERFE

#### RECOMMENDED FOR:

- · Low back pain or back pain.
- Pain in the pelvic girdle.
- Postural, cervical or lumbar discomfort.

#### CHARACTERISTICS:

Belt made of breathable materials and fabrics with a very soft feel that helps relieve the unpleasant feeling of weight in the lower abdomen, back and pelvic pain, making it very comfortable to wear.

Comprised of firm reinforcements in the back area to support the curvature of the back and protect the spinal column. In the front area, foam fabric is located below the abdomen and elevates it. Together with the bilateral tensioners, they allow uniform distribution of excess weight so no pressure is exerted on the baby. Includes finger hooks for easy fitting. The design allows it to adapt to changes in shape and tummy size throughout the different stages of pregnancy.

SIZE FRONTAL HEIGHT 11 CM BACK HEIGHT 26 CM

ne Size
His All Min-max waist circumference: 90-135 cm.











ADAPTABLE THROUGHOUT



### evolution







"Premium" version: includes reinforcement with foam fabric and 2 silicone pads. Enables upper containment, which is ideal for walks and improving daily activities. The silicone pads provide a massage effect on the back, which improves blood circulation and a feeling of comfort.









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SIZE FRONTAL HEIGHT 11 CM

**BACK HEIGHT 26 CM** 



One Size Fits All

Min-max waist circumference: 90-135 cm.













Get rest: all pregnant women need some time to rest and disconnect. While sitting on the sofa a bit, the more flexible massage band places gentle pressure on the painful areas.



Make some effort: a baby's arrival requires thousands of preparation work so everything's ready. A little DIY in the bedroom? By combining the reinforcement strap with the massage band, the muscle support will be firmer and painful areas will be relieved.



A little mobility: mother and baby lead active lives; there's a lot to plan, buy and check without any breaks in their dayto-day, a walk through a lovely area, visiting the gynaecologist and then a little shopping... in these cases, the reinforcement strap will help transfer the weight from the abdomen to the hips without putting any pressure on the baby, thereby limiting the feeling of fatigue.

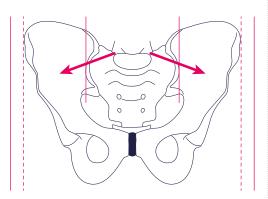


### PHYSIOLOGICAL CHANGES FOR THE PELVIS

### During pregnancy



The immense hormonal changes cause the pubic symphysis to extend during pregnancy 0.5 to 12 mm.

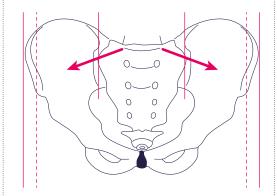


This excessive joint mobility can cause instability, inflammation, pain and irradiation.

### After childbirth

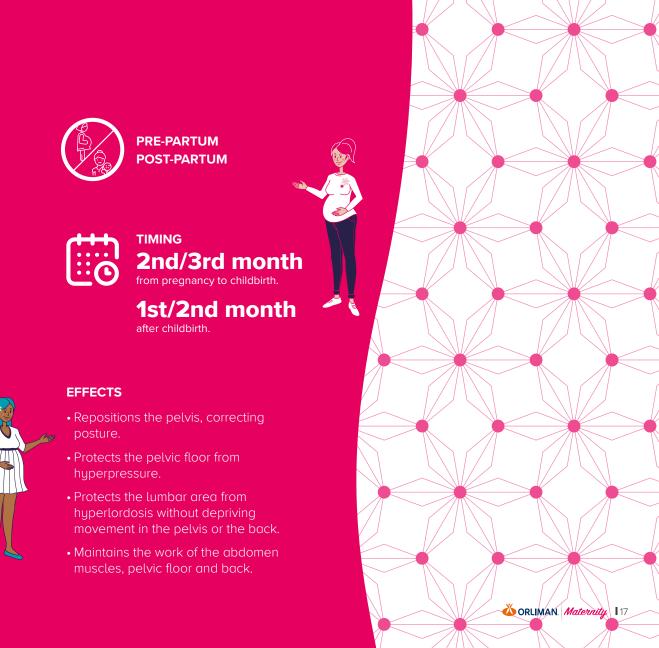


It helps bring the pelvis into the normal alignment, relieving the hips and improving posture.



The goal is to stabilize the pelvis, relieve the ligaments and pubic symphysis so the muscles can work as normal.





### light





### Sacroiliac belt







#### RECOMMENDED FOR:

- Lumbar, sacroiliac or pelvic pain.
- Weakness of the pelvic floor.
- Back pain.
- Ligamentous hyperlaxity/

#### hypermobility.

- Prolapse or descent of pelvic organs (POP).
- Stress urinary incontinence.

#### CHARACTERISTICS:

Elastic belt offering support for the pelvis that provides constant and uniform pressure in cases of pain or instability. The elastic provides adequate support and the fastening can be adjusted using the additional adjustment strap. It protects the perineal area, does not press on the organs or limit mobility. Comfortable to wear, the strands of silicone inside prevent it from moving during use as they maintain correct position. In addition, it has 2 silicone pads with relief points that provide a pleasant massage effect to improve blood circulation and provide a pleasant feeling of comfort.

SIZE

One Size Fits All









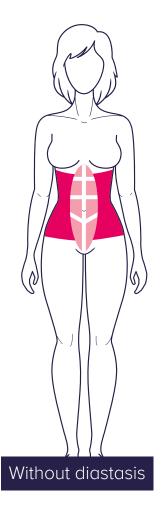


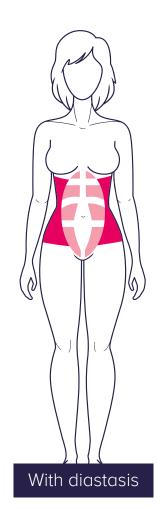
### PHYSIOLOGICAL CHANGES

FOR THE ABS (STRAIGHT MUSCLES)

#### **PATHOLOGY**

- During pregnancy, the abdominal muscles stretch to make room for the foetus while it grows. They get weaker as the volume of the abdomen increases, forming a central white line where the rectus abdominis muscles are connected.
- If the increase was excessive, the muscles don't always recover very easily after birth which causes rectus abdominis diastasis.







POST-PARTUM



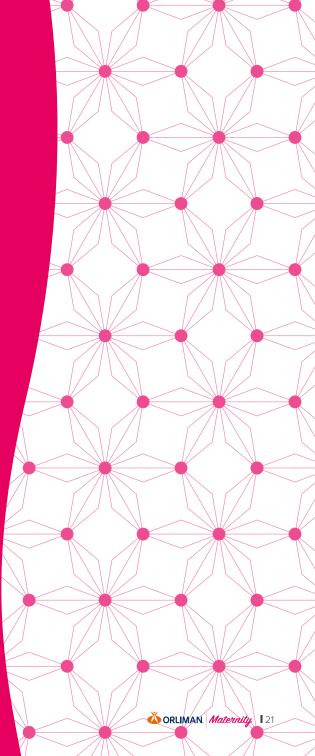
**TIMING**From childbirth to

1st/2nd month



#### **EFFECT OF ORTHOTICS**

- Compresses and relieves pain in the abdominal area.
- Reduces stretch marks and helps firm sagging skin.
- Lowers discomfort and the feeling of emptiness in the abdomen
- Improves posture and enables mobility in the first days after giving birth.





### activ



### Abdominal belt







#### RECOMMENDED FOR:

- · Postpartum abdominal pain.
- Prevention of postpartum stretch marks.

#### CHARACTERISTICS:

Elastic belt made with breathable fabric and flexible stays for greater support. Designed to speed up the recovery process, it encourages the return of the wearer's original shape and helps reshape the abdomen and waist providing comfort and support. It helps the abdominal wall reposition more quickly as it applies strength in the weakened area, helping women gain confidence and feel better. It adapts perfectly to the waist and hips and has a large closing section, adapting to changes in the abdomen.

**HEIGHT 22 CM** 

SIZE	ABDOMINAL PERIMETER	
1	80 - 95 cm	
2	95 - 110 cm	
3	110 - 130 cm	















### PHYSIOLOGICAL CHANGES FOR CIRCULATION AND VENOUS RETURN

### **PATHOLOGY BLOOD CIRCULATION**

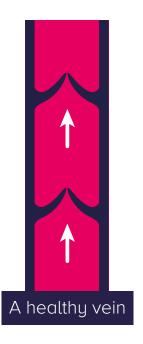
Blood circulation activated by the heart allows the body's cells guarantee their metabolism and eliminate waste. This is guaranteed by two types of blood vessels:

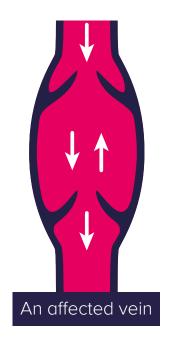
- The arteries, which make up the high-pressure circulatory system and take the blood from the gorta to the pulmonary artery.
- The veins, which make up the lowpressure circulatory system and take blood to the heart.

#### **VENOUS RETURN**

90% of venous return in the lower limbs is intramuscular while the remaining 10% is through the superficial veins.

The valves are small gates that prevent blood from flowing backwards and, in the legs, they prevent it from flowing back to the foot. Proper valve function is essential to good venous return.



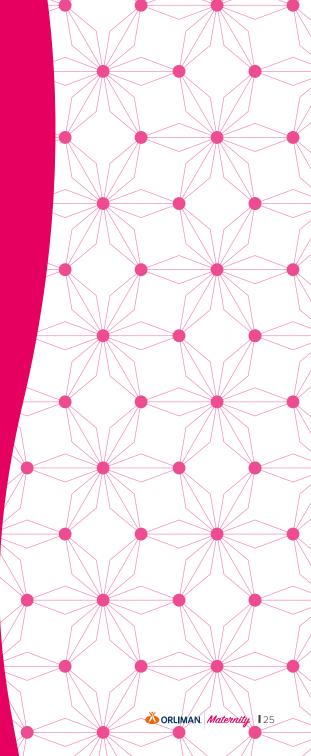






#### **EFFECTS**

• Preventive compression



#### move





Tights

BEIGE: OMT630





#### RECOMMENDED FOR:

- Tired legs with slight pain or swelling.
- Problems with slight varicose veins or small spider veins.
- Prevention of venous pathologies.

#### CHARACTERISTICS:

Tights designed for pregnant women or women with a large abdomen. The fabric provides preventive compression of 15 to 21 mmHg, which makes it very effective in preventing swelling in the legs, possible venous complications in addition to encouraging rest. Because of the materials it is made with, it has a super soft touch and the fine mesh allows it to adapt perfectly to the legs, thighs and abdomen.

COLOUR: Black, ref.: OMT631 ● / Beige, ref.: OMT630 ●



SIZE	A (CM)	B (CM)	C (CM)	D (CM)	E (CM)
1 - S	19 - 20	29 - 36	28 - 35	39 - 53	46 - 56
2 - M	20 - 22	32 - 40	30 - 38	41 - 56	49 - 60
3 - L	22 - 25	34 - 43	33 - 41	45 - 60	56 - 67
4 - XL	25 - 27	37 - 45	35 - 44	46 - 62	62 - 74
5 - XXL	27 - 31	39 - 48	37 - 47	47 - 64	65 - 78



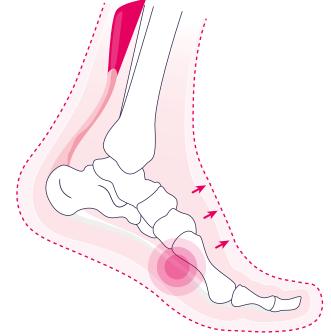




### PHYSIOLOGICAL CHANGES FOR THE FEET

#### **PATHOLOGY**

- Changes in foot morphology during pregnancy are mainly caused by an increase in contact between the arches of the foot and the ground.
- This causes changes in the foot structure such as increased foot width and length and a lower arch.
- An accumulation of liquid in the soft tissues causes oedema and expands the volume of the foot which increases discomfort and makes it difficult to walk.



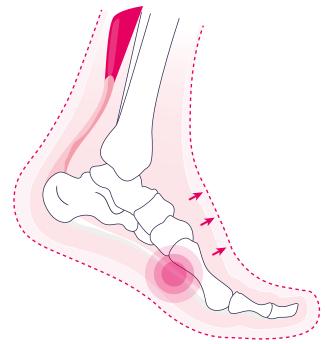
















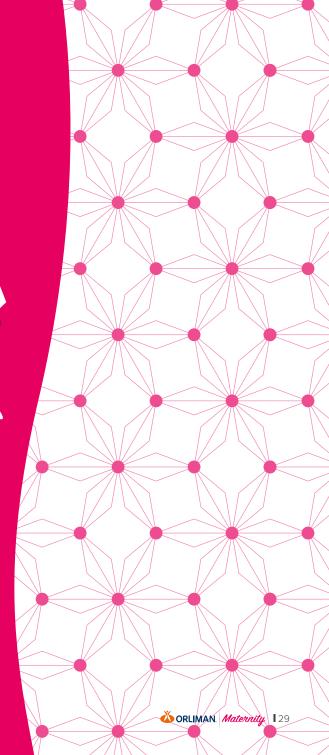
**TIMING** 2nd/3rd month of pregnancy until the

1st/2nd month after childbirth.



#### **EFFECTS**

- Distributes plantar pressure.
- Improves dynamic balance.
- Absorbs impacts received by ankles, knees and hips in contact with the ground.















#### RECOMMENDED FOR:

- Talalgia.
- Bursitis.
- Tendonitis of the Achilles tendon.
- Joint pain.

#### CHARACTERISTICS:

Heel cushions made of silicone which, due to their viscoelastic properties, cushion points where weight is supported both when walking or in a standing position. The design features slightly elevated side edges that guide the foot comfortably and naturally. There is a cavity that keeps the heel in place and provides natural cushioning that absorbs impacts, making them very comfortable to wear in footwear.

SIZE	SIZE (EU)	SIZE (UK)
1	35 - 38	2,5 - 5
2	39 - 42	6 - 8



















### Comfort insoles

OMT900

#### RECOMMENDED FOR:

- · Metatarsalgia and talalgia.
- Pain in the inner longitudinal arch due to plantar fasciitis or other tendinopathies.
- Minor or moderate flat foot.
- An unstable ankle.
- Runner's knee.
- Painful or tired feet.

#### CHARACTERISTICS:

Designed with a combination of comfortable soft zones to absorb impact and semirigid areas to offer stability during movement. The areas of the heel and metatarsal heads are padded, reducing the pressure peaks in the moments of support and impulsion, where there is a significant impact on the joints. The midfoot area is made of a semi-rigid material, supporting the longitudinal foot arches. The contour is elevated in the heel area, which provides adequate stability of the rearfoot. The heel pad provides dynamic control of the foot, guiding it properly in every step.

SIZE	SIZE (EU)	SIZE (UK)
1	36 - 38	3.5 - 5
2	38 - 40	5 - 6.5
3	40 - 42	6.5 - 8







### PRODUCT RANGE



















OMT601

Back support brace

One Size Fits All









OMT611 Back support brace

One Size Fits All



SIZE	



SIZE SIZE One Size Fits All



OMT621 Abdominal belt









OMT630









**Tights** 

1-S 2-M 3-L 4-XL 5-XXL

OMT631









SIZE











Comfort insoles



### OTHER PATHOLOGIES AND ASSOCIATED NEEDS

### Carpal tunnel syndrome

Fluid retention in pregnancy causes swelling and can compress structures in the tunnel which leads to carpal tunnel syndrome when combined with brusque or repetitive movements of the hands and fingers or the use of vibrating equipment. A pregnant woman would feel tingling, numbness, weakness and pain in the fingers, thumbs, hands and, occasionally, in the arms. These symptoms often get worse at night and will likely worsen after the fourth month.

### Swelling, muscle pain, posture difficulties

A number of musculoskeletal changes occur during pregnancy due to the progressive weight gain, hormones and postural adaptation which may cause associated discomfort such as cramps, muscle pain, pain associated with posture changes, tired legs, bruising and swelling. To minimize this discomfort, a few tips like applying cold packs, using anatomical cushions for more appropriate postures and massages can help lower the risks.

### Post-partum pain: Vaginal inflammation, contractions and haemorrhoids

During pregnancy, the body goes through various changes which don't immediately disappear when the baby is born. The wound created by episiotomy or vaginal tear during childbirth can be painful for a few weeks. It's also possible to feel contractions during the first few days after childbirth. These contractions, which often seem like menstrual cramps, help prevent excessive bleeding as they compress the blood vessels in the uterus. Other possible sources of discomfort are haemorrhoids or inflammation of the veins near the anus. Viscoelastic cushions can be used for relief from the discomfort during recovery.

### Foot pathologies

Pregnancy affects the entire locomotor system and the feet are a part of this system. The most common problems in nearly all pregnancies are: plantar fasciitis due to changes in weight and the centre of gravity, swelling in the feet caused by more fluid retention and ingrowing toenails since the swelling causes the retention and inflammation in the foot to possibly force the nail into the flesh. A few recommendations such as washing and drying the feet every day, moisturizing them, choosing the proper footwear and using podiatry products can reduce the risk.

#### Related products:

#### M760

Immobilizing wrist brace with an ambidextrous palm splint.

#### **ACE511**

Short semi-rigid wrist strap - palm splint

#### ACE503D

Semi-rigid textile wrist brace - palm splint

#### ACE503I

Semi-rigid textile wrist brace - palm splint

#### Related products:

#### OSL3100

Ear pillow

#### OSL3200

Viscoelastic anatomical pillow

#### Related products:

#### OSL1240

Viscoelastic anti-bedsore horseshoe cushion with memoru foam

#### OSL1260

Visco-silicone anti-bedsore square cushion with memory foam

#### Related products:

#### GL-105 / ACP914

Gel finger cot

#### GL-201 / ACP919

Pure gel metatarsal pad

#### GL-208 / ACP924

Bunion protector with a metatarsal pad

#### GL-300 / ACP925

100% gel foot protector with pinky fabric

#### PS-19 / ACP925

Invisible adhesive mini gel forefoot pads

#### PS-20 / ACP926

Adhesive pads for slave

#### sandals

PS-21 / ACP927 Adhesive heel protector

#### (ankle socks) PL-700F

Women's super thin silicone insoles lined with a metatarsal pad





## **ADVERTISING**





DISPLAY#OMT
Display with girdle

150 x 30 cm



CAT#OMTI

Maternity Catalogue
20 x 20 cm











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