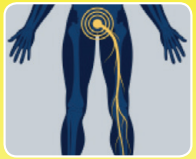
INDENTIFYING MUSCLE, JOINT AND BACK PAINS

NUROFEN

	Lower Back Pain	Sciatica	Shoulder and Neck Pain	Sprains and Strains	Osteoarthritis
SENSATION	Customers will complain of pain in the area between the bottom of their ribs and top of their legs.[1] 	A low back pain that runs from the buttocks, along the back of one of the legs, often as far as the foot or toes.[5] 	Experience pain and stiffness in the neck or shoulder.[7,8] Neck pain can also be felt in the head, arm or shoulder.[7] Shoulder pain can also be felt on the top and side of the shoulder.[8] 	Sprains can cause pain around the joint, tenderness, swelling and bruising.[11] Strains can lead to muscle pain and spasm, weakness, swelling, inflammation and/or cramping.[11] 	Joints may be painful after use, swollen or tender and may be stiff in the morning, usually lasting for less than 30 minutes[12,13] – and/or makes a crackling or grating sound when they move. 
IMPACT	Can affect customers' ability to do everyday tasks.[1] They may also find that moving and changing their posture can make the pain worse.[1]	Can affect customers' ability to do everyday tasks.[5] They may also find that movement can be painful.[5]	Customers can find their pain is worse when they move.[7,8]	Some customers with sprains may be unable to walk.[11]	Can affect customers' ability to move or do everyday tasks.[12]
DURATION	Back pain should improve within a few weeks to a few months.[2]	Lasts a few weeks to a few months.[5]	Most neck pain clears within a few weeks.[7] Some shoulder pains can take years to clear.[8]	Mild sprains/strains should clear up within several weeks.[11] Customers with severe injuries may take months to heal.[11]	It's a chronic condition, and can't be cured but treatments are available to reduce the symptoms.[13]
CAUSES	Usually back pain isn't due to an underlying condition, but can be triggered by everyday activities such as poor posture or lifting something awkwardly.[3]	Happens when the sciatic nerve becomes irritated or is compressed.[5,6]	Most often due to poor posture or neck strain, sport or work activities, sleeping awkwardly. Can also be due to an underlying condition.[7-10]	A sprain is due to tearing or stretching the ligament.[11] A strain is a tear or stretch of the muscles.[11]	Due to a loss of cartilage in the joint.[12] This results in inflammation and changes to the bone,[12] which is thought to be due to the joint trying to repair itself.[14]
CUSTOMERS	Most common body pain in the UK affecting around 1 in 3 adults each month.[4] Most common in customers aged 41–50 years.[1]	May be more likely in customers who regularly undertake strenuous activity or experience whole body vibration.[5]	Customers with neck pain are more likely to be:[7] • Older • Female • Had previous low back and neck pain. Shoulder pain is more common in customers who do heavy lifting or have had a shoulder injury.[8]	Can affect customers who:[11] • Regularly play sports or don't exercise regularly • Have fallen/landed awkwardly • Have had a previous strain or sprain.	At risk are those who:[13] • Have a family history of OA • Have overused their joint after an injury • Have other health problems that can damage joints • Are overweight as this can put the joints under extra strain.
WHEN TO REFER	**Refresh your knowledge of red flag symptoms at www.rbforhealth.co.uk/pain**				

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TREATING MUSCLE, JOINT AND BACK PAINS*

	Ibuprofen	Ibuprofen and Paracetamol	Ibuprofen and Codeine	Topical Ibuprofen
THE PRODUCT	 Tablets/Caplets contain 200mg ibuprofen.	 Tablets contains standard ibuprofen 200mg + paracetamol 500mg.	 Contains standard ibuprofen 200mg + codeine 12.8mg.	 Contains 10% standard ibuprofen gel.
HOW IT WORKS	Blocks the production of prostaglandins in the brain and body.[15,16]	Blocks prostaglandin production in two ways.[15,16]	Works by blocking prostaglandin production in the body and brain plus binding to codeine receptors in the brain.[15,16]	Works by penetrating the skin to block prostaglandin production at the site of injury.[15]
WHO IS IT FOR?	• Customers with no specific pain relief needs • Customers wanting long-lasting, effective pain relief.	• Customers who want stronger pain relief than ibuprofen or paracetemol alone • Customers who prefer to avoid codeine.	• Customers with pain that is not relieved by aspirin, ibuprofen or paracetamol alone • Customers who are happy to take codeine based product.	• Customers prefer a topical option for muscle and joint pains • Customers worried about side effects from oral ibuprofen.
WHY RECOMMEND?	Provides up to 8 hours of pain relief.[17**]	Provides more pain relief than either ibuprofen or paracetamol alone.[19†] A meta analysis has shown that more customers can get the relief they need than with either ibuprofen or paracetamol alone or Solpadeine Plus.[20‡]	Nurofen Plus is proven to provide greater and longer-lasting pain relief than Solpadeine Plus Soluble.[21†]	Topical ibuprofen is proven to ease pain in 55% of customers with acute musculoskeletal pain, including sprains and strains.[22]
CUSTOMER COUNSELLING	Taking ibuprofen with food can delay its absorption,[18] Nurofen Tablets and Nurofen Plus can be taken with water and not necessarily with food unless advised by the doctor or pharmacist, (it is recommended to take Nuromol with food and water). Always read the label to understand if suitable for children.[#]			

*Please check product information below for specific licensed indications. Not all product listed are suitable for all muscle, joint & back pains. **Based on 400mg dose †In a dental pain study. Fixed dose ibuprofen 200mg/paracetamol 500mg vs ibuprofen 200mg or paracetamol 500mg; Fixed dose ibuprofen 400mg/paracetamol 1000mg vs ibuprofen 400mg or paracetamol 1000mg. ‡ Based on Number-Needed to Treat, i.e. the number of customers that have to take the medicine for one person to benefit. The lower the NNT number, the more effective the medicine and the greater the number of people who will benefit. Based on combination 200mg ibuprofen/500mg paracetamol versus 400mg ibuprofen or 1000mg paracetamol or a combination of 1000mg paracetamol/13mg codeine/60mg caffeine. #There are some special warnings and contradictions regarding GI safety of ibuprofen (including those with pre-existing GI conditions) - please see SPC for details.

REFERENCES: 1. NICE Clinical Knowledge Summaries. Low back pain. April 2017. Accessed March 2018. https://cks.nice.org.uk/back-pain-low-without-radiculopathy 2. NICE. Low back pain and sciatica in over 16s: assessment and management. Guideline NG59. November 2016. https://www.nice.org.uk/guidance/ng59. 3. NHS Choices. Back pain. Accessed March 2018. http://www.nhs.uk/Conditions/Back-pain/Pages/Introduction.aspx 4. Jordan KP, et al. BMC Musculoskeletal Disorders 2010, 11:144. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2903510/pdf/1471-2474-11-144.pdf. 5. NICE Clinical Knowledge Summaries. Sciatica. February 2017. Accessed March 2018. https://cks.nice.org.uk/sciatica-lumbar-radiculopathy 6. NHS Choices. Sciatica. Accessed March 2018. http://www.nhs.uk/conditions/sciatica/Pages/Introduction.aspx 7. NICE. Clinical Knowledge Summaries. Neck pain – non-specific. April 2015. Accessed March 2018. https://cks.nice.org.uk/neck-pain-non-specific 8. NICE. Clinical Knowledge Summaries. Shoulder pain. April 2017. Accessed March 2018. https://cks.nice.org.uk/shoulder-pain 9. NHS Choices. Neck pain and stiff neck. Accessed March 2018. http://www.nhs.uk/Conditions/neck-pain/Pages/Introduction.aspx. 10. NHS Choices. Shoulder pain. Accessed March 2018. http://www.nhs.uk/conditions/shoulderpain/Pages/Introduction.aspx 11. NICE. Clinical Knowledge Summaries. Sprains and strains. March 2016. Accessed March 2018. https://cks.nice.org.uk/sprains-and-strains 12. NICE. Osteoarthritis care and management. February 2014. Guideline CG177. https://www.nice.org.uk/guidance/cg177 13. NHS Choices. Osteoarthritis. Accessed March 2018. http://www.nhs.uk/conditions/Osteoarthritis/Pages/Introduction.aspx 14. Porcheret M, et al. Arthritis Research UK. Reports on the Rheumatic Diseases, 2011; Series 6: Hands on No 10. www.arthritisresearchuk.org/health-professionals-andstudents/reports/hands-on/hands-on-autumn-2011.aspx 15. Moore RA, et al. Cochrane Database of Systematic Reviews, 2015, Issue 11. Art. No.: CD010794. DOI: 10.1002/14651858.CD010794.pub2. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010794.pub2/abstract 16. Burian M, et al. Pharmacol & Ther, 2005;107:139–154 17. Brain P, et al. Clin J Pain, 2015;31:444–50 18. Moore RA, et al. Br J Clin Pharmacol, 2015; 80:381–8. http://onlinelibrary.wiley.com/doi/10.1111/bcp.12628/epdf 19. Mehlisch DR, et al. Clin Ther, 2010; 32:1033-49 20. Bandolier. Investigating over-the-counter analgesics. Accessed March 2018. http://www.bandolier.org.uk/booth/painpag/Acutrev/Analgesics/OTC%20analgesics1.html 21. McQuay H, et al. Anaesthesia, 1992;47:672-77 22. Derry S, et al. Cochrane Database of Systematic Reviews, 2015, Issue 6. Art. No.: CD007402. DOI: 10.1002/14651858.CD007402.pub3.2015. http://www.cochrane.org/CD007402/SYMPT_topical-non-steroidal-anti-inflammatory-drugs-acute-musculoskeletal-pain-adults

TREATING MUSCLE, JOINT AND BACK PAINS*

*Please check product information below for specific licensed indications. Not all product listed are suitable for all muscle, joint & back pains.

ESSENTIAL INFORMATION:

NUROFEN 200mg TABLETS: Ibuprofen 200 mg/tablet. **Indications (GSL):** Relief of migraine-headaches, backache, dental pain, neuralgia and period pains as well as rheumatic and muscular pains and cold and flu symptoms. **Indications (P):** Relief of migraine-headaches, backache, dental pain, neuralgia and period pains as well as rheumatic and muscular pains, pain of non-serious arthritis conditions and cold and flu symptoms. **Legal Category:** GSL **MA Holder:** Reckitt Benckiser Healthcare (UK) Ltd, SL1 4AQ. **MRRP:** £2.66 (16s). Information about this product, including adverse reactions, precautions, contra-indications, and method of use can be found at: www.medicines.org.uk/emc/medicine/24209

NUROMOL 200mg/500mg TABLETS. Active ingredients: Each tablet contains ibuprofen (200mg) and paracetamol (500mg). **Indications:** For the temporary relief of mild to moderate pain associated with migraine, headache, backache, period pain, dental pain, rheumatic and muscular pain, pain of non-serious arthritis, cold and flu symptoms, sore throat and fever. This product is especially suitable for pain which requires stronger analgesia than ibuprofen or paracetamol alone. **Dosage instructions:** Adults over 18 yrs: One tablet to be taken up to three times per day with water. If needed, dose may be increased to two tablets three times a day. Leave at least six hours between doses. Maximum of 6 tablets per 24 hours. To minimise side effects, it is recommended that patients take Nuromol with food. If symptoms persist, worsen or if the product is required for more than 3 days, the patient should consult a doctor. Elderly: The lowest effective dose should be used for the lowest possible duration. The patient should be monitored regularly for gastrointestinal bleeding when using a NSAID. **Contra-indications:** Known hypersensitivity to ibuprofen, paracetamol or any other excipients. History of hypersensitivity reactions associated with acetylsalicylic acid/NSAIDs. History of, or an existing gastrointestinal ulceration/perforation or bleeding, defects in coagulation, severe hepatic failure, severe renal failure or severe heart failure. During the last trimester of pregnancy. Do not give: in concomitant use with other paracetamol-containing products or with other NSAID containing products, including cyclo-oxygenase-2 (COX-2) specific inhibitors and doses of acetylsalicylic acid above 75 mg daily. **Side effects, precautions:** The risk of paracetamol overdose is greater in patients with non-cirrhotic alcoholic liver disease. Immediate medical advice should be sought in the event of an overdose, even if the patient feels well, because of the risk of delayed, serious liver damage. Caution is required in elderly patients and in patients with certain conditions: respiratory disorders, cardiovascular, cerebrovascular, renal and hepatic impairment, gastrointestinal bleeding, ulceration and perforation, SLE and mixed connective tissue disease. Serious skin conditions and impaired female fertility may occur. Severe skin reaction known as DRESS syndrome can occur. Symptoms of DRESS include: skin rash, fever, swelling of lymph nodes and an increase of eosinophils (a type of white blood cells). **Warnings for use:** do not give to patients who have taken ibuprofen or paracetamol in the last 6 hours; do not give in combination with paracetamol or NSAID containing medicine. Common side effects: abdominal pain, diarrhoea, dyspepsia, nausea, stomach discomfort and vomiting. Increase in amino-transferase, gammaglutamyltransferase, blood creatine, blood urea, liver disfunction. **Recommended retail price:** £3.99 (12s); £6.99 (24s). **Supply classification:** P. **Marketing authorisation holder:** Reckitt Benckiser Healthcare (UK) Ltd, Slough, SL1 3UH. **MA number:** PL 00063/0649 **Date last revised:** February 2018. For full information refer to SPC (www.medicines.org.uk/emc/product/4967)

NUROFEN PLUS TABLETS : Each tablet contains 200mg ibuprofen and 12.8mg of Codeine phosphate. **Indications:** is indicated in patients older than 12 years of age for the short term treatment of acute, moderate pain (such as rheumatic and muscular pain, backache, migraine, headache, neuralgia, period pain and dental pain) which is not considered to be relieved by other analgesics such as paracetamol, ibuprofen or aspirin alone. Posology and method of administration: Adults, the elderly and children over 12 years of age: One or two tablets every four to six hours. Children aged 12-18 years: One or two tablets every four to six hours. Children under 12 years: Nurofen plus (which contains Codeine) should not be used in children below the age of 12 years because of the risk of opioid toxicity due to the variable and unpredictable metabolism of codeine to morphine. Elderly: No special dosage modifications are required for elderly patients, unless renal or hepatic function is impaired, in which case dosage should be assessed individually. Do not take more than 6 tablets in 24 hours. Leave at least four hours between doses and do not take more than 1200mg in any 24 hour period. The duration of treatment should be limited to 3 days and if no effective pain relief is achieved the patients/carers should be advised to seek the views of a physician. For short term use only. Codeine should be used at the lowest effective dose for the shortest period of time necessary to relieve symptoms. The patient should consult a doctor if symptoms persist or worsen or if the product is required for more than 3 days. Method of administration: for oral administration. **Contraindications:** Hypersensitivity to Ibuprofen, Codeine or to any of the constituents listed in the product. Patients who have previously shown hypersensitivity reactions (e.g. asthma, rhinitis, angioedema or urticaria) in response to Acetylsalicylic Acid (aspirin) or other non-steroidal anti-inflammatory drugs (NSAIDSs). Active or history of recurrent peptic ulcer/haemorrhage (two or more distinct episodes of proven ulceration or bleeding). History of gastrointestinal bleeding or perforation, related to previous NSAIDs therapy. Severe hepatic failure, renal failure or heart failure. Last trimester of pregnancy. In women during breastfeeding. Respiratory depression, chronic constipation. Concomitant treatment with Monoamine Oxidase Inhibitors (MAOIs) or within 14 days of stopping treatment. In all paediatric patients (0-18 years of age) who undergo tonsillectomy and/or adenoidectomy for obstructive sleep apnoea syndrome due to an increased risk of developing serious and life threatening adverse reactions. In patients for whom it is known they are CYP2D6 ultra-rapid metabolisers. **Special warnings and precautions for use:** Undesirable effects may be minimised by using the lowest effective dose for the shortest duration necessary to control symptoms. The elderly are at increased frequency of adverse reactions to NSAIDS, especially gastrointestinal bleeding and perforation which may be fatal. Respiratory: Bronchospasm may be precipitated in patients suffering from or with a previous history of bronchial asthma or allergic disease. Other NSAIDS: The use of Nurofen Plus with concomitant NSAIDS including cyclooxygenase-2-selective inhibitors should be avoided. SLE and mixed connective tissue disease: Systemic lupus erythematosus and mixed connective tissue disease due to increased risk of aseptic meningitis. Renal: Renal impairment as renal function may further deteriorate. There is a risk of renal impairment in dehydrated children and adolescents. Hepatic: Hepatic dysfunction. Cardiovascular and cerebrovascular effects: Caution (discussion with doctor or pharmacist) is required prior to starting treatment in patients with a history of hypertension and/or heart failure as fluid retention, hypertension and oedema have been reported in association with NSAID therapy. Clinical trial and epidemiological data suggest that use of ibuprofen, particularly at high doses (2400 mg daily) and in long-term treatment may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke). Overall, epidemiological studies do not suggest that low dose ibuprofen (e.g. ≤ 1200 mg daily) is associated with an increased risk of myocardial infarction. Nurofen Plus tablets should be used with caution in those with hypotension and/ or hypothyroidism. The tablets should be used with caution in patients with raised intracranial pressure or head injury. Impaired female fertility: There is limited evidence that drugs which inhibit cyclo-oxygenase/ prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible upon withdrawal of treatment. Gastrointestinal effects: NSAIDs should be given with care to patients with a history of gastrointestinal disease (ulcerative colitis, Crohn's disease) as these conditions may be exacerbated. Gastrointestinal bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at anytime during treatment, with or without warning symptoms or a previous history of serious GI events. The risk of GI bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation, and in the elderly. These patients should

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Reckitt Benckiser Healthcare (UK) ltd on: 0333 200 5345.

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commence treatment on the lowest dose available. Patients with a history of GI toxicity, particularly when elderly, should report any unusual abdominal symptoms (especially GI bleeding) particularly in the initial stages of treatment. Caution should be advised in patients receiving concomitant medications which could increase the risk of gastrotoxicity, ulceration or bleeding, such as oral corticosteroids, or anticoagulants such as warfarin, selective serotonin reuptake inhibitors or anti-platelet agents such as Acetylsalicylic Acid (aspirin). When GI bleeding or ulceration occurs in patients receiving ibuprofen, the treatment should be withdrawn. Dermatological effects: Serious skin reactions, some of them fatal, including exfoliative dermatitis, Stevens-Johnson syndrome and toxic epidermal necrolysis, have been reported very rarely in association with the use of NSAIDs. Patients appear to be at highest risk of these reactions early in the course of therapy, the onset of the reaction occurring in the majority of cases within the first month of treatment. Nurofen PLUS should be discontinued at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity. Do not take concurrently with any other Codeine containing compounds. Care is advised in the administration of Codeine to patients with hypotension, hypothyroidism, adrenocortical insufficiency, shock, obstructive bowel disorders, acute abdominal conditions (e.g. peptic ulcer), recent astrointestinal surgery, gallstones, myasthenia gravis, a history of peptic ulcer or convulsions and also in patients with a history of drug abuse. Elderly patients may metabolise or eliminate opioid analgesics more slowly than younger adults. Codeine should be used with caution in the elderly and debilitated patients as they may be more susceptible to the respiratory depressant effects. Prolonged regular use of Codeine, except under medical supervision, may lead to physical and psychological dependence (addiction) and result in withdrawal symptoms, such as restlessness and irritability once the drug is stopped. If you are pregnant or are being prescribed medicines by your doctor, seek this advice before taking this product. Care is advised in the administration of this product in patients with severe renal or severe hepatic impairment (hepatic disease). CYP2D6 metabolism: Codeine is metabolised by the liver enzyme CYP2D6 into morphine, its active metabolite. If a patient has a deficiency or is completely lacking this enzyme an adequate analgesic effect will not be obtained. Estimates indicate that up to 7% of the Caucasian population may have this deficiency. However, if the patient is an extensive or ultra-rapid metaboliser there is an increased risk of developing side effects of opioid toxicity even at commonly prescribed doses. These patients convert codeine into morphine rapidly resulting in higher than expected serum morphine levels. General symptoms of opioid toxicity include confusion, somnolence, shallow breathing, small pupils, nausea, vomiting, constipation and lack of appetite. In severe cases this may include symptoms of circulatory and respiratory depression which may be life-threatening and very rarely fatal. **Side effects:** Blood and Lymphatic System Disorders, very rare: haematopoietic disorders. Immune System Disorders, uncommon: hypersensitivity reactions with urticaria and Pruritus; very rare: severe hypersensitivity reactions. Symptoms could be: facial, tongue and throat swelling, dyspnoea, tachycardia, hypotension, (anaphylaxis, angioedema or severe shock). Metabolism and Nutrition Disorders, not known: decreased appetite. Psychiatric Disorders, not known: depression, hallucination, confusional state, dependence, mood altered, restlessness, nightmares. Nervous System Disorders, uncommon: headache; very rare: aseptic meningitis; not known: dizziness, drowsiness, convulsion, Intracranial, pressure increased, headache, dyskinesia. Eye Disorders, not known: vision blurred, diplopia. Ear and Labyrinth disorders, not known: vertigo. Cardiac Disorders, not known: cardiac failure, oedema, bradycardia, palpitations. Vascular Disorders, not known: hypertension, orthostatic hypotension. Respiratory, Thoracic and Mediastinal Disorders, not known: respiratory tract reactivity comprising asthma, bronchospasm or dyspnea. Respiratory depression, cough suppression. Gastrointestinal Disorders, uncommon: abdominal pain, nausea and dyspepsia; rare: diarrhoea, flatulence, constipation and vomiting; very rare: peptic ulcer, gastrointestinal perforation or gastrointestinal haemorrhage, melaena, and haematemesis. Mouth ulceration and gastritis. Exacerbation of ulcerative colitis and Crohn's disease. Not known: dry mouth. Hepatobiliary Disorders, very rare: liver disorder; not known: biliary colic. Skin and Subcutaneous Tissue Disorders, uncommon: various skin rashes; very rare: Severe forms of skin reactions such as bullous reactions, including Stevens-Johnsons Syndrome, erythema multiforme and toxic epidermal necrolysis can occur. Not known: flushing. Musculoskeletal and Connective Tissue Disorders, not known: muscle rigidity. Renal and Urinary Disorders, very rare: acute renal failure; not known: ureteric colic, dysuria. General and Administration Site Conditions, not known: hypothermia, hyperhidrosis, irritability, fatigue, malaise. Investigations, very rare: haemoglobin decreased. **Product Licence Number:** PL 00063/0376. **Licence Holder:** Reckitt Benckiser Healthcare (UK) Ltd, SL1 4AQ. **Legal category:** Pharmacy Only MRRP: £5.99 (24s); £7.29 (32s). **Date:** September 2017 – For full information refer to SPC (www.medicines.org.uk/emc/product/5627)

NUROFEN JOINT & BACK PAIN RELIEF MAX STRENGTH 10% GEL: Contains Ibuprofen 10% w/w. **Indications:** backache, rheumatic pain, muscular aches, pains or swellings such as sprains, strains and sports injuries. **Legal Category:** GSL. **MA Holder:** Mercury Pharma Group Ltd., EC4N 7BL. Distributed by Reckitt Benckiser Healthcare (UK) Ltd. **MRRP:** 40g: £6.99. Information about these products, including adverse reactions, precautions, contra-indications, and method of use can be found at: www.medicines.org.uk/emc/medicine/2741

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