

MRI screening

This document contains instructions for the screening form that is used for the 3T and 7T MRI scanner of the Spinoza Centre for Neuroimaging. The instructions in this document do not cover all questions or doubts you may have. If you have any questions, please contact Diederick or Wietske. You can also find information in www.mrisafety.com.

The MR operator is ultimately responsible for the screening and safety of the participant.

The instructions in this document apply to users of the Spinoza Centre and are limited to scientific research. In other institutes/hospitals, different rules may apply.

Name	
Date of birth	
Weight (est.)	KG

Information about the participant is required so that when a scan is forwarded to the participant's GP, he or she can identify the participant. The weight estimate is required for SAR calculations. Make sure that these fields and the rest of the form are completely filled out before the start of the scan.

Please indicate what applies to you:

1.	Do you have any metal (shavings/fragments) in your body (e.g., in your eyes) as a result of work in the metal industry or as a result of war (explosions)? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2.	Do you have or used to have a pacemaker / defibrillator (ICD) / leads / implantable loop recorder / drug(insulin) pump / hydrocephalus shunt? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3.	Do you have a neurostimulator (Deep Brain Stimulator)? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.	Do you have vascular clips, shunts or stents? <i>Contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.	Do you have a hearing aid that is not removable (e.g., cochlear implants or BAHA with a magnetic mount)? <i>Contraindication. Hearing aids need to be removed.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6.	Do you have dental constructs (false teeth, implants, braces, retainers etc.)? <i>Potential contraindication. Braces are a contraindication. With other dental structures artefacts may occur. The extent of artefact formation is unpredictable. Wires are usually not a problem. When dentures are removed, it is safe to scan the participant. When the type and year of placement of a non-removable device are known, consult with Spinoza staff whether it is safe to scan the participant or not. A physician's statement regarding the device's safety is not sufficient.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7.	Do you have an implanted artificial lens that was placed before 1990? <i>Potential contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient. Eye laser surgery (e.g., LASEK) is not a problem.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

8.	Do you have a prosthesis for stretching the skin (tissue expander)? <i>Contraindication. If type and year of placement are known: consult Spinoza staff. A physician's statement regarding the device's safety is not sufficient.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9.	Have you had a polyp removed or a bleeding treated in the esophagus, stomach, large/small intestine in the past six months? <i>Potential contraindication. Clips placed on polyps leave the body through the faeces. Usually this happens after a month or two, but at the latest after 6 months. Participants can therefore only be scanned after 6 months. An X-ray could be made. Clips placed on bleedings generally remain in the esophagus, stomach and intestines, but are made of titanium or, even better for artefacts, nitinol. This would be no problem.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10.	Have you had any surgery in the past six weeks (regardless of whether metal may have been placed or used)? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11.	Have you ever had any surgery where metal may have been implanted (e.g., artificial joints)? <i>Contraindication. When the type and year of placement are known: consult with Spinoza staff. A physician's statement regarding the device's safety is not sufficient. Only when placed after 2002 and it has been more than 6 weeks since the last surgery, it is safe to scan the participant. All other participants cannot be scanned safely. It is safe to scan a participant with an external prosthesis, once the prosthesis has been removed.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12.	Do you have tattoos, piercings and/or permanent cosmetics (make-up)? <i>Contraindication. All piercings need to be removed, even when they are not located on the participant's head. It is safe to scan the participant with a tattoo, but the participant needs to be informed that there is a very small chance that the tattoo may heat up and if this is the case, they should immediately notify you by pressing the alarm button. In case of permanent make-up, please contact Spinoza staff.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
13.	Do you use a Continuous or Flash Glucose Monitoring System? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.	Do you use transdermal patches (nicotine patch, hormone patch, etc.)? <i>Contraindication. All transdermal patches need to be removed due to risk of heating.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15.	Do you wear anti-odour / antimicrobial clothing (containing nano silver)? <i>Contraindication. All anti-odour / antimicrobial clothing needs to be removed due to risk of heating.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
16.	Do you have an intrauterine contraceptive device? Mirena, Adiana silicone or Essure implant is not a problem. <i>Potential contraindication. With both a hormonal as well as a copper IUD the brain can be scanned safely when it has been at least six weeks since IUD placement. IUDs containing other metals than copper are not prescribed in NL, these cannot be scanned.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
17.	Are you pregnant or do you suspect you might be pregnant? <i>Contraindication. If the participant answered 'yes', he or she cannot be scanned safely.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
18.	Do you or have you ever suffered from claustrophobia (e.g., does an elevator frighten you)? <i>Conditional. MR operator and participant decide together. Take your time to discuss this with the participant. In some cases it is advised to first book a test scan in the mock scanner free of charge.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
19.	Do you or have you ever suffered from tinnitus (ringing in the ears)? <i>Conditional. MR operator and participant decide together. Tinnitus is often a sign of (beginning) hearing damage. Because of the small chance of further hearing damage, Spinoza advises against scanning of people with tinnitus. If the researcher wants to scan anyway, it is at their risk (and not Spinoza).</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No