

Supplementary file S1

| Date            | Activity         | Intensity variations |                     |                      | Description  |
|-----------------|------------------|----------------------|---------------------|----------------------|--|
|                 |                  | Easy Elf             | Moderate Mrs Claus  | Strenuous Santa      |  |
| 1 <sup>st</sup> | Star jumps       | 25 reps              | 50 reps             | 100 reps             | To do a star jump, stand tall with your arms by your side and knees slightly bent. Jump up, extending your arms and legs out into a star shape in the air. Land softly, with your knees together and hands by your side. Keep your abs tight and back straight during the exercise.  |
| 2 <sup>nd</sup> | Lunges           | 25 reps              | 50 reps             | 100 reps             | Stand upright, feet together, and take a controlled step forward with your right leg, lowering your hips toward the floor by bending both knees. The back knee should point toward but not touch the ground, and your front knee should be directly over the ankle. Press your right heel into the ground and push off with your left foot to bring your left leg forward, stepping with control into a lunge on the other side. This completes two reps.  |
| 3 <sup>rd</sup> | Burpees          | 25 easy burpees      | 25 moderate burpees | 25 strenuous burpees | Burpees are difficult! They require strength as well as stamina. Because of this, we have given you three variations, so you can pick the one that suits you best.   |
| 4 <sup>th</sup> | Walk, jog or run | 30 min walk          | 30 min walk/jog     | 30 min run           | Use this time to deliver your Christmas cards. If you don't have any cards to deliver, no problem! Simply walk, jog or run around your neighbourhood and soak in the Christmas spirit! To help you understand which intensity you are working at, think about if you are able to hold a conversation. Walking you should be able to hold a conversation with relative ease, jogging you should be able to hold a conversation but with a little more difficulty, and running you should struggle to hold a conversation. |
| 5 <sup>th</sup> | Skipping         | 10x10 reps           | 20x10 reps          | 30x10 reps           | You may think you need a skipping rope to skip... think again! If you don't have a rope, simply skip as you would, moving your wrists and hands to mimic the swing of the rope.  |

|                  |                     |                  |                      |                       |  |
|------------------|---------------------|------------------|----------------------|-----------------------|--|
| 6 <sup>th</sup>  | Squats              | 25 reps          | 50 reps              | 100 reps              | Your feet should be between hip- and shoulder-width distance apart, with your toes slightly turned out. Your spine should be neutral, shoulders back, chest open. Make sure you keep your heels down and keep them planted throughout the squat. Initiate the movement by sending the hips back as if you're sitting back into an invisible chair. Bend knees to lower down as far as possible with chest lifted in a controlled movement. Keep lower back neutral. Press through heels to stand back up to starting position. |
| 7 <sup>th</sup>  | Sprints on the spot | 10x5 secs        | 10x10 secs           | 10x20 secs            | How fast you move your feet is up to you. Try to move fast enough to raise your heart rate and to increasing your breathing. Don't forget to move your arms at the same time! Embrace your inner Dasher!   |
| 8 <sup>th</sup>  | Yoga                | 3 easy yoga sets | 3 moderate yoga sets | 3 strenuous yoga sets | Yoga is an ancient form of exercise that focuses on strength, flexibility and breathing to boost physical and mental wellbeing. The main components of yoga are postures (a series of movements designed to increase strength and flexibility) and breathing. If you are new to yoga, don't worry! Simply follow along to the video using the link below!  |
| 9 <sup>th</sup>  | Hopscotch           | 6 sets           | 12 sets              | 24 sets               | Why not draw a hopscotch design outside using chalk or inside using masking tape and follow the squares there (1 set) and back (2 sets) etc. If you're stuck for space, hopscotch on the spot and rest after each set.   |
| 10 <sup>th</sup> | Dancing             | 1 song           | 3 songs              | 5 songs               | Dance like no one is watching! This is a great activity to try whilst you are waiting for the kettle to boil or for dinner to cook. Go crazy and use all of your body parts.   |
| 11 <sup>th</sup> | Walk or run         | 30 min walk      | 60 min walk          | 30 min run            | How about getting out into nature and enjoying your daily activity at your local beauty spot. Regardless of the intensity you choose, make sure to start slowly and start to pick up the intensity if you feel up to it. If the weather is bad, consider if there is an indoor location you could use instead. If you are planning to go for a run, make sure you spend a few minutes  |

|                  |                   |                                      |   |  |   |
|------------------|-------------------|--------------------------------------|---|--|---|
|                  |                   |                                      |   |  | warming up and cooling down before and after. This could be as simple as a few minutes of walking at either end of your run. If you cannot find all the time in one go, feel free to break up your walk or run into several shorter activities. Please consider the weather conditions when deciding whether or not to do the physical activity idea outside. If there is a weather warning, please consider altering the activity appropriately.   |
| 12 <sup>th</sup> | Star jumps        | 30 reps                              | 60 reps                                   | 120 reps                                       | To do a star jump, stand tall with your arms by your side and knees slightly bent. Jump up, extending your arms and legs out into a star shape in the air. Land softly, with your knees together and hands by your side. Keep your abs tight and back straight during the exercise.   |
| 13 <sup>th</sup> | Plank             | 3x30 secs knee plank                 | 3x30 secs full plank                      | 3x60 secs full plank                           | Perform this exercise on a carpeted floor or yoga mat for increased comfort. Keep your forearms and toes (and knees if you're an easy elf) firmly planted on the ground to give you balance. Make sure that your body is in a straight line while in the plank position, e.g., your back is flat and not arched. Don't forget to breathe whilst performing your plank!  |
| 14 <sup>th</sup> | Mountain climbers | 5x10 secs standing mountain climbers | 5x10 secs walking plank mountain climbers | 5x10 secs running plank mountain climbers      | Try to keep your core still and stable throughout the mountain climbers. You may wish to do the walking and running mountain climbers on a matt to increase comfort and to avoid slipping.  |
| 15 <sup>th</sup> | Sit-up twists     | 50 sit-up twists                     | 50 weighted sit-up twists                 | 50 weighted sit-up twists with feet in the air | Sit on the floor, leaning backwards slightly, with your knees bent and your feet on the floor. Your arms should be extended in front of you – perpendicular to your body. Twist your body to the right side until your arms are parallel with the floor while breathing out. Hold the contraction for a second and move back to the starting position before using the same technique to move to the left. For Moderate Mrs Claus try holding a weight (bag, tins etc) in your hands as you |

|                  |             |                                |                               |                                |   |
|------------------|-------------|--------------------------------|-------------------------------|--------------------------------|---|
|                  |             |                                |                               |                                | twist. For Strenuous Santa try holding a weight (bag, tins etc) in your hands and lifting your feet of the ground as you twist.   |
| 16 <sup>th</sup> | Ice skating | 10x10 reps walking ice skating | 5x10 reps jumping ice skating | 10x10 reps jumping ice skating | If you choose either the walking or the jumping ice skating activity, it is really important you try to keep in control of your movement, not allowing yourself to sway too much and keeping your knees squared (knees over your feet) when you flex your knee. Be careful if doing this activity outside as the ground may be slippery. If this is the case, consider doing this activity inside or on a mat.  |
| 17 <sup>th</sup> | Dancing     | 1 song                         | 3 songs                       | 5 songs                        | Dance like no one is watching! This is a great activity to try whilst you are waiting for the kettle to boil or for dinner to cook. Go crazy and use all of your body parts.  |
| 18 <sup>th</sup> | Walk or run | 30 min walk                    | 60 min walk                   | 30 min run                     | How about getting out into nature and enjoying your daily activity at your local beauty spot. Regardless of the intensity you choose, make sure to start slowly and start to pick up the intensity if you feel up to it. If the weather is bad, consider if there is an indoor location you could use instead. If you are planning to go for a run, make sure you spend a few minutes warming up and cooling down before and after. This could be as simple as a few minutes of walking at either end of your run. If you cannot find all the time in one go, feel free to break up your walk or run into several shorter activities. Please consider the weather conditions when deciding whether or not to do the physical activity idea outside. If there is a weather warning, please consider altering the activity appropriately. |
| 19 <sup>th</sup> | Burpees     | 30 easy burpees                | 30 moderate burpees           | 30 strenuous burpees           | Burpees are difficult! They require strength as well as stamina. Because of this, we have given you three variations, so you can pick the one that suits you best.  |
| 20 <sup>th</sup> | Squats      | 30 reps                        | 60 reps                       | 120 reps                       | Your feet should be between hip- and shoulder-width distance apart, with your toes slightly turned out. Your spine should be neutral, shoulders back, chest open. Make sure   |

|                  |             |                         |                      |                         |  |
|------------------|-------------|-------------------------|----------------------|-------------------------|--|
|                  |             |                         |                      |                         | you keep your heels down and keep them planted throughout the squat. Initiate the movement by sending the hips back as if you're sitting back into an invisible chair. Bend knees to lower down as far as possible with chest lifted in a controlled movement. Keep lower back neutral. Press through heels to stand back up to starting position.   |
| 21 <sup>st</sup> | Lunges      | 30 reps                 | 60 reps              | 120 reps                | Stand upright, feet together, and take a controlled step forward with your right leg, lowering your hips toward the floor by bending both knees. The back knee should point toward but not touch the ground, and your front knee should be directly over the ankle. Press your right heel into the ground, and push off with your left foot to bring your left leg forward, stepping with control into a lunge on the other side. This completes two reps.   |
| 22 <sup>nd</sup> | Plank       | 3x45 secs<br>knee plank | 3x45 secs full plank | 3x90 secs full<br>plank | Perform this exercise on a carpeted floor or yoga mat for increased comfort. Keep your forearms and toes (and knees if you're an easy elf) firmly planted on the ground to give you balance. Make sure that your body is in a straight line while in the plank position, e.g., your back is flat and not arched. Don't forget to breathe whilst performing you plank!  |
| 23 <sup>rd</sup> | Walk or run | 30 min walk             | 60 min walk          | 30 min run              | How about getting out into nature and enjoying your daily activity at your local beauty spot. Regardless of the intensity you choose, make sure to start slowly and start to pick up the intensity if you feel up to it. If the weather is bad, consider if there is an indoor location you could use instead. If you are planning to go for a run, make sure you spend a few minutes warming up and cooling down before and after. This could be as simple as a few minutes of walking at either end of your run. If you cannot find all the time in one go, feel free to break up your walk or run into several shorter activities. Please consider the weather conditions when deciding whether or not to do the physical activity idea outside. If |

|                  |                |                      |                      |                      |  |
|------------------|----------------|----------------------|----------------------|----------------------|--|
|                  |                |                      |                      |                      | there is a weather warning, please consider altering the activity appropriately.   |
| 24 <sup>th</sup> | Stair climbing | 15 flights of stairs | 20 flights of stairs | 30 flights of stairs | When performing your stair climbs, make sure the stairs are clear of any obstacles that may be dangerous. If you don't have access to stairs, try and find something that can replicate a step and replace each flight with 15 step ups. Make sure the step is stable, will hold your weight and won't move when you step onto it. |

# Active Advent

Wednesday the 1st of December,  
2021



# Active Advent

Thursday the 2nd of December,  
2021



## Walking through the snow!

### 'Star' jumps - choose your level



#### Easy Elf

Try to do 25 star jumps throughout your day



#### Moderate Mrs Claus

Try to do 50 star jumps throughout your day



#### Strenuous Santa

Try to do 100 star jumps throughout your day



#### Easy Elf

Try to do 25 walking lunges throughout the day, mimicking wading through fresh snow!



#### Moderate Mrs Claus

Try to do 50 walking lunges throughout the day, mimicking wading through fresh snow!



#### Strenuous Santa

Try to do 100 walking lunges throughout the day, mimicking wading through fresh snow!

### Tips and advice

To do a star jump, stand tall with your arms by your side and knees slightly bent. Jump up, extending your arms and legs out into a star shape in the air. Land softly, with your knees together and hands by your side. Keep your abs tight and back straight during the exercise.

Don't feel the need to do all the star jumps in one go! Spread them throughout your day.



### Tips and advice

Stand upright, feet together, and take a controlled step forward with your right leg, lowering your hips toward the floor by bending both knees. The back knee should point toward but not touch the ground, and your front knee should be directly over the ankle. Press your right heel into the ground, and push off with your left foot to bring your left leg forward, stepping with control into a lunge on the other side. This completes two reps.

Don't feel the need to do all your lunges at once! Spread them throughout your day.



## **Supplementary file S2 – Active Advent video demonstrations**

[Walking Ice Skating – Easy Elf](#)

[Jumping Ice Skating – Moderate Mrs Claus and Strenuous Santa](#)

[Sit-up Twists – Easy Elf](#)

[Weighted Sit-up Twists – Moderate Mrs Claus](#)

[Weighted Sit-up Twists with feet in the air – Strenuous Santa](#)

[Standing Mountain Climbers – Easy Elf](#)

[Walking Plank Mountain Climbers – Moderate Mrs Claus](#)

[Running Plank Mountain Climbers – Strenuous Santa](#)

[Yoga – Easy Elf](#)

[Yoga – Moderate Mrs Claus](#)

[Yoga – Strenuous Santa](#)

[Skipping without a rope - technique 1](#)

[Skipping without a rope - technique 2](#)

[Burpees – Easy Elf](#)

[Burpees – Moderate Mrs Claus](#)

[Burpees – Strenuous Santa](#)



# Stay Healthy this Christamas

**“Being healthy isn’t a fad or a trend, instead it’s a lifestyle”.**

Engaging in regular physical activity, eating healthy and managing the demands of everyday life is important, even during the festive period.



# Physical Activity

Being active is really good for your body, mind and health. If you aren't very active and spend long periods of time sitting (being sedentary) you increase your risk of developing serious conditions, including heart disease, type 2 diabetes and some cancers.

Adults should do some type of physical activity every day. Exercise just once or twice a week can reduce the risk of heart disease or stroke.

Adults should aim to:

- do at least 150 minutes of moderate intensity activity a week or 75 minutes of vigorous intensity activity a week
- reduce time spent sitting or lying down and break up long periods of not moving with some activity



# Eating

What you eat, and how much, is very important. Having a healthy diet will help you to maintain a healthy weight, reduce your risk of developing type 2 diabetes, high blood pressure and high cholesterol and reduce your risk of developing coronary heart disease and some cancers.

What do I need to eat for my health?

A balanced diet is recommended for good health. This means you need to eat a wide variety of foods in the right amounts to give your body what it needs. For a balanced diet you should eat:

- plenty of fruit and vegetables,
- plenty of bread, rice, potatoes, pasta and other starchy foods (choose wholegrain varieties)
  - some milk and dairy foods
- some meat, fish, eggs, beans and other non-dairy sources of protein
- just a small amount of food and drink high in fat and/or sugar



# Smoking

Smoking is the most damaging thing you can do to your health. From the day-to-day effects on your heart and your breathing, to longer-term smoking-related diseases such as heart disease, cancer and stroke, the consequences are severe. Your smoke can also harm your family's health, too.

No matter how long you've smoked for, quitting can help improve your health straight away. Curb those nicotine cravings and improve your chances of quitting with stop smoking aids. Remember, there are plenty of treatments out there and they can give you the extra support you need to kick the habit for good. Many smokers also find e-cigarettes a helpful way to manage their cravings.



# Alcohol

Men and women are advised not to drink more than 14 units of alcohol a week. This is the same as 6 pints of average strength beer a week. If you regularly drink above the lower risk guidelines, cutting back on alcohol can help your general wellbeing. From weight gain to increasing your risk of cancer, alcohol can have serious effects on your body. Once you start cutting back, you may quickly find you have more energy and feel less tired during the day as well as seeing improvements to your general health.



# Sleep



Good-quality sleep is more important than the amount of sleep that you get and it helps to keep you feeling healthy. The odd bad night's sleep can make you feel tired and irritable the next day, but it won't harm your health. However, regular poor-quality sleep can have a huge effect on your health, putting you at risk of developing serious medical conditions and can affect your body, thoughts, emotions and behaviour.

Sleep provides you with a boost to your energy and immune system, helping your body recover from illnesses. While you sleep your body builds and repairs itself by making new tissue. Sleep helps your brain to recover and revive itself, helping it to make sense of the day, storing your memories and creating new ideas. Sleep allows your mind to unwind and de-stress and this allows your mental and emotional wellbeing to be restored.

There are simple things you can do to help you wind down and prepare for bed. Think about setting a bedtime routine where you wind down ready for sleep and go to bed at a set time. Remove distractions, like your TV, computer and phone, from your bedroom. Avoid caffeine, nicotine, and alcohol too close to bedtime as they can keep you awake.

# Stress

Lots of things can cause stress, including work, relationships and money problems. Stress can affect how you feel, think, behave and how your body works – ranging from how well you sleep to your immune system. In the short-term that's not really a bad thing, but long-term stress puts your health at risk.

Reducing your stress levels and feeling more in control boosts your mood and means you are more able to cope with life's ups and downs. Getting stress under control supports your immune system and helps prevent serious health problems, such as high blood pressure and heart disease.

There's no quick-fix cure for stress, but there are simple things you can do to help you stress less. These include relaxing, exercising, eating a healthy and balanced diet, and talking to someone.



**Supplementary Table 1. Comparison of participants' characteristics with missing MVPA and Strength at week 3**

| Characteristic     | Missing MVPA/Strength at Week 3 |                 |
|--------------------|---------------------------------|-----------------|
|                    | Yes (n=18)                      | No (n=83)       |
| Age mean (sd), n   | 44.1 (9.8), 18                  | 46.9 (13.5), 83 |
| Gender             |                                 |                 |
| Male               | 4 (33.3)                        | 8 (66.6)        |
| Female             | 14 (15.7)                       | 75 (84.3)       |
| Employed           |                                 |                 |
| Yes                | 18 (20.5)                       | 70 (79.5)       |
| No                 | 0 (0)                           | 13 (100)        |
| Ethnicity          |                                 |                 |
| White              | 17 (19.1)                       | 72 (80.9)       |
| Non white          | 1 (8.3)                         | 11 (91.7)       |
| BMI mean (sd), n   | 26.6 (5.8), 18                  | 27.1 (5.6), 81  |
| Underweight        | 0 (0)                           | 1 (100)         |
| Healthy weight     | 10 (23.3)                       | 33 (76.7)       |
| Overweight         | 3 (11.1)                        | 24 (88.9)       |
| Obese              | 5 (17.9)                        | 23 (82.1)       |
| IMD quintile       |                                 |                 |
| 1 (least deprived) | 1 (25.0)                        | 3 (75.0)        |
| 2                  | 2 (40.0)                        | 3 (60.0)        |
| 3                  | 3 (15.8)                        | 16 (84.2)       |
| 4                  | 4 (20.0)                        | 16 (80.0)       |
| 5 (most deprived)  | 13 (25.5)                       | 38 (74.5)       |

Figures are N (%) unless stated otherwise.