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## DISSECTING HEALTH

# Scarlett McNally: Boosting swimming for health and joy

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Many years ago I wrote a dissertation on convergent evolution, looking at the similarities between humans and aquatic mammals such as whales, seals, and dolphins, who share intelligence, lack of fur, subcutaneous body fat, and longitudinal shape. My intercalated BSc in anthropology involved analysing the arguments around an aquatic phase in human evolution, suggesting that early hominids may have arisen from a prehistoric ape adapted for seashore dwelling, rather than on the savannah. Should we maybe acknowledge the health implications of our possible watery past?

Swimming and other aquatic activities have huge benefits for health and wellbeing. People of all ages and communities can benefit from water's hydrostatic pressure, as well as improved social connectedness and exercise. For people with back or lower limb problems or obesity the low impact of swimming can make it an ideal mode of exercise, and charities such as Versus Arthritis recommend it.<sup>1</sup> In preparation for undergoing surgery, exercise such as swimming can significantly reduce complications and the length of stay in hospital.<sup>2</sup>

Swimming also gives proven reductions in frailty, falls, and osteoporosis.<sup>3 4</sup> Together these cause 500 000 fragility fractures a year in the UK,<sup>5</sup> and as an orthopaedic surgeon I see daily the ensuing pain, operations, social care requirements, and reduction in independence. Swimming is estimated to prevent more than 20 000 cases of type 2 diabetes a year, saving the NHS a recurring cost of £103m.<sup>6</sup> A YouGov poll found that 1.4 million British adults with mental health difficulties said that swimming had reduced their anxiety or depression.<sup>7</sup> And an estimate for England claims that swimming and water activities generate £2.4bn of social value.<sup>6</sup>

### Personalised programmes

Strategies for preventing illness need to consider how people can get involved, as well as why it's important. This includes primary prevention (never getting the condition) and tertiary prevention (reducing the complications of existing conditions).<sup>8</sup> Swimming helps with both.

Since 2017 I've been part of Swim England's Health Commission. Our fact sheets<sup>9</sup> cover topics including swimming with epilepsy, diabetes, or mental health conditions and before surgery,<sup>9</sup> as well as promoting "dementia friendly" swimming.<sup>10</sup>

Swim England has won awards for public health<sup>11</sup> alongside Good Boost—a rehabilitation app that offers people a personalised programme for water based exercises using a waterproof device. App users reported a 41% reduction in pain and a 52%

improvement in quality of life, with a 30% uptake from people in the most deprived postcodes and many participants with multimorbidity.<sup>12</sup>

The new Swimming as Medicine programme, launched with the Royal College of General Practitioners,<sup>13 14</sup> is limited only by a lack of awareness. It's accompanied by training and resources for staff on "water wellbeing" and "access to aquatics." Swim England and I also rewrote the "no running, no petting" poolside posters of my childhood to say, "You are welcome to bring inhalers or walking sticks poolside," with new information on swimming with long term conditions.<sup>15</sup>

Cold water swimming, defined as below 15°C, is increasingly popular, with 3.5 million adults going open water swimming at least once a year, and it can lead to excellent improvements in mental health.<sup>16 17</sup> Wild swimming fits the "green and blue spaces" health benefits of nature and water,<sup>18</sup> but these are limited by sewage pollution.<sup>6</sup>

Swimming benefits all ages and brings us joy.<sup>6</sup> On the south coast, sea swimming groups such as the Silver Dippers, the Pevensy Plungers, and the Bexhill Bluetits are within cycling distance of my home. There's a Poolfinder web page ([www.swimming.org/poolfinder](http://www.swimming.org/poolfinder)) for the public to check what pools or swimming groups exist in their local area.<sup>19</sup> And swimming is in the curriculum for primary school—but 23% of children<sup>20</sup> leave primary school unable to swim the required 25 metres, with inequalities in access and attainment among children from ethnic minorities and lower income households.<sup>6</sup> Swimming is a life skill, and drowning prevention skills should be a minimum for all. Swimming pools are closing down, and more funding is needed to improve access.<sup>21</sup>

Let's support everyone to get them swimming—for their bodies, minds, and communities.

Scarlett McNally is a consultant orthopaedic surgeon, deputy director of the Centre for Perioperative Care, president of the Medical Women's Federation, and a member of Swim England's Health Commission.

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