Nutritional Supplement Habits and Perceptions of Athletes with a Disability.

Thank you for choosing to complete this questionnaire, it should only take approximately 15-20 minutes. Please remember that your answers are confidential and we therefore ask you to be as honest as possible. The following section refers to details about you and your sport.

1. What is your age?
   18-24 ☐    25-30 ☐    31-35 ☐    36-40 ☐    41-45 ☐    46+ ☐

2. What is your gender?
   Male □
   Female □

3. What is your nationality?

4. What is your ethnic origin?
   White □
   Black □
   Asian □
   Hispanic □
   Other □ Please state in the box below

5. How much do you weigh? (Please provide units of measurement such as kg, lbs)
   □ Actual (measured in the last 3 months)
   □ Estimated

6. What is your height? (Please provide units of measurement such as feet, metres)
   □ Actual (measured in the last 3 months)
   □ Estimated

7. What is your current sport/discipline/event? (Please give as much detail as possible)

8. How many years have you been competing in your current sport?

9. What is the highest level you currently represent in your sport?
   □ Club
   □ Regional/Development
   National □ If checked, please state which country in the box below.

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
10. On average, how many hours per week do you train in total? (Please check 1 box)

- 0-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26+

11. What is your disability? (Please give as much detail as possible)

12. What is your sport-specific classification?

The following section refers to your nutritional supplement habits. The term ‘supplements’ refers to any product intended to supplement the diet, provide nutrients and/or enhance performance such as vitamins, minerals, carbohydrate sports drinks/bars, amino acids, herbal remedies, creatine and caffeine etc.

13. How important do you think good nutrition is to sports performance?

- Very important
- Important
- Moderately important
- Of little importance
- Unimportant

14. Do you monitor your hydration status?

- Yes
- No

14A. Which of the following methods do you use? (Please check all that apply)

- I use thirst as an indicator of hydration
- I check my urine colour/compare it to a urine/pee chart
- I weigh myself before and after exercise
- A sport scientist/nutritionist/coach measures my hydration status using a machine to measure urine specific gravity or serum osmolality
- Other (Please state in the box below)

14B. Please indicate if there is a reason why you can’t/don’t use any of these methods.

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
The following section asks about your use of nutritional supplements in the last 6 months. The term ‘supplements’ refers to any product intended to supplement the diet, provide nutrients and/or enhance performance such as vitamins, minerals, carbohydrate sports drinks/ bars, amino acids, herbal remedies, creatine and caffeine etc.

15. Have you used any nutritional supplements in the last 6 months?
   Yes ☐ Please go to Question 15A, B and C
   No ☐ Please go to Question 15D

15A. For each sport-specific/ performance-enhancing supplement that you have used in the last 6 months please complete a row in the table below.
Examples of sport-specific/ performance-enhancing supplements include sports drinks, gels, bars, drinks powders, creatine, beta-alanine, caffeine, beetroot juice...

*Do not enter health supplements here; these will be entered in Question 15B
If you have any doubt whether a product is classified as a nutritional supplement then please write it down.

<table>
<thead>
<tr>
<th>Supplement type and brand</th>
<th>How do you take this supplement?</th>
<th>Reason for taking the supplement?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>We are looking for as much detail as possible For example,</td>
<td>(Please check all that apply)</td>
</tr>
<tr>
<td></td>
<td>• How often? Daily, once a week...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When? During a cold/ in the off-season... Or Only on training or rest days</td>
<td></td>
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<tr>
<td></td>
<td>• Only for some training? Strength, endurance or skills sessions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Timing? Before, during or after a session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How much? Do you know the dose/ how many grams or pills a day?</td>
<td></td>
</tr>
</tbody>
</table>

Example: Powerade ION4 isotonic sports drink
Example: Sip during a cardio session lasting more than 60 min or if I have not eaten in the 3-4 hours before training. Example: Medical need/ deficiency ☐ Due to an inadequate diet ☐ Support immune system ☒ To provide energy ☐ Increase strength/power ☐ To aid recovery ☐ Because everyone else does ☐ Because I am told to ☐ Other-Hydration/ tastes better

Supplement 1

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
<table>
<thead>
<tr>
<th>Supplement</th>
<th>Medical need/ deficiency</th>
<th>Due to an inadequate diet</th>
<th>☐</th>
<th>Support immune system</th>
<th>☐</th>
<th>To provide energy</th>
<th>☐</th>
<th>Increase strength/power</th>
<th>☐</th>
<th>To aid recovery</th>
<th>☐</th>
<th>Because everyone else does</th>
<th>☐</th>
<th>Because I am told to</th>
<th>☐</th>
<th>Other (Please state)</th>
<th>☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplement 2</td>
<td>Medical need/ deficiency</td>
<td>Due to an inadequate diet</td>
<td>☐</td>
<td>Support immune system</td>
<td>☐</td>
<td>To provide energy</td>
<td>☐</td>
<td>Increase strength/power</td>
<td>☐</td>
<td>To aid recovery</td>
<td>☐</td>
<td>Because everyone else does</td>
<td>☐</td>
<td>Because I am told to</td>
<td>☐</td>
<td>Other (Please state)</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 3</td>
<td>Medical need/ deficiency</td>
<td>Due to an inadequate diet</td>
<td>☐</td>
<td>Support immune system</td>
<td>☐</td>
<td>To provide energy</td>
<td>☐</td>
<td>Increase strength/power</td>
<td>☐</td>
<td>To aid recovery</td>
<td>☐</td>
<td>Because everyone else does</td>
<td>☐</td>
<td>Because I am told to</td>
<td>☐</td>
<td>Other (Please state)</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 4</td>
<td>Medical need/ deficiency</td>
<td>Due to an inadequate diet</td>
<td>☐</td>
<td>Support immune system</td>
<td>☐</td>
<td>To provide energy</td>
<td>☐</td>
<td>Increase strength/power</td>
<td>☐</td>
<td>To aid recovery</td>
<td>☐</td>
<td>Because everyone else does</td>
<td>☐</td>
<td>Because I am told to</td>
<td>☐</td>
<td>Other (Please state)</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 5</td>
<td>Medical need/ deficiency</td>
<td>Due to an inadequate diet</td>
<td>☐</td>
<td>Support immune system</td>
<td>☐</td>
<td>To provide energy</td>
<td>☐</td>
<td>Increase strength/power</td>
<td>☐</td>
<td>To aid recovery</td>
<td>☐</td>
<td>Because everyone else does</td>
<td>☐</td>
<td>Because I am told to</td>
<td>☐</td>
<td>Other (Please state)</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 6</td>
<td>Medical need/ deficiency</td>
<td>Due to an inadequate diet</td>
<td>☐</td>
<td>Support immune system</td>
<td>☐</td>
<td>To provide energy</td>
<td>☐</td>
<td>Increase strength/power</td>
<td>☐</td>
<td>To aid recovery</td>
<td>☐</td>
<td>Because everyone else does</td>
<td>☐</td>
<td>Because I am told to</td>
<td>☐</td>
<td>Other (Please state)</td>
<td>☐</td>
</tr>
</tbody>
</table>
Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.

### Supplement 7

**Medical need/ deficiency**
- [ ] Due to an inadequate diet
- [ ] Support immune system
- [ ] To provide energy
- [ ] Increase strength/power
- [ ] To aid recovery
- [ ] Because everyone else does
- [ ] Because I am told to
- [ ] Other (Please state)

### 15B. For each health supplement that you have used in the last 6 months please complete a row in the table below.
Examples of health supplements include vitamins, minerals, herbal remedies, probiotics, omega 3, cranberry extract...
If you have any doubt whether a product is classified as a nutritional supplement then please write it down.

<table>
<thead>
<tr>
<th>Supplement type and brand</th>
<th>How do you take this supplement?</th>
<th>Reason for taking the supplement?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How often? Daily, once a week...</td>
<td>(Please check all that apply)</td>
</tr>
<tr>
<td></td>
<td>When? During a cold/ in the off-season... Or Only on training or rest days</td>
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<td></td>
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<tr>
<td></td>
<td>How much? Do you know the dose/ how many grams or pills a day?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplement 1</th>
<th>Medical need/ deficiency</th>
<th>Due to an inadequate diet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Support immune system</td>
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<tr>
<td></td>
<td>To provide energy</td>
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<td>To aid recovery</td>
<td></td>
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<td></td>
<td>Because I am told to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (Please state)</td>
<td></td>
</tr>
<tr>
<td>Supplement 2</td>
<td>Medical need/ deficiency</td>
<td>☐</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Supplement 3</td>
<td>Medical need/ deficiency</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 4</td>
<td>Medical need/ deficiency</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 5</td>
<td>Medical need/ deficiency</td>
<td>☐</td>
</tr>
<tr>
<td>Supplement 6</td>
<td>Medical need/ deficiency</td>
<td>☐</td>
</tr>
</tbody>
</table>
Supplement 7

<table>
<thead>
<tr>
<th>Medical need/ deficiency</th>
<th>Due to an inadequate diet</th>
<th>Support immune system</th>
<th>To provide energy</th>
<th>Increase strength/power</th>
<th>To aid recovery</th>
<th>Because everyone else does</th>
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<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

15C. Where did you obtain/ buy your supplements? (Please check all that apply)
- Provided by a team sponsor ☐
- Provided by a sports nutritionist/ dietitian ☐
- From a supermarket ☐
- From a health food/ sports shop ☐
- From a pharmacy ☐
- I ordered them on the internet ☐
- Other (Please state in the box below) ☐

15D. If you don’t use supplements, why not? (Please check all that apply)
- I do not need them ☐
- They are unhealthy ☐
- I don’t know enough about them ☐
- I am concerned about a positive drugs test ☐
- They are too expensive ☐
- My sport does not allow them ☐
- Taking supplements is like cheating ☐
- Other (Please state in the box below) ☐

16. Have you taken any supplements by injection in the last 6 months?
- Yes ☐ Please go to Question 16A
- No ☐ Please continue to Question 17

16A. Please indicate which supplements you have had injected and why you used them in the box below.

<table>
<thead>
<tr>
<th>Product</th>
<th>Why?</th>
</tr>
</thead>
</table>

17. Have you EVER experienced any negative/side-effects from using a supplement? E.g gastrointestinal distress, rapid bowel movements, spasticity, cramps etc
- Yes ☐ Please go to Question 17A
- No ☐ Please continue to Question 18

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
**17A. Which product(s) did you use and what were the negative/side effects?**

<table>
<thead>
<tr>
<th>Product (Please specify brand where possible)</th>
<th>Negative/side-effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following section relates to the sources of information YOU use when considering your nutritional supplement habits.

**18. Do you have access to information on anti-doping?**

- Yes ☐
- No ☐

**19. Have you ever attended a workshop/presentation on nutritional supplements and/or anti-doping?**

- Yes ☐ Please go to Question 19A
- No ☐ Please go to Question 19B

**19A. If yes, when did you attend it?**

**19B. If no, would you like to?**

- Yes ☐
- No ☐

**20. Would you like more information and education regarding nutritional supplements and anti-doping?**

- Yes ☐ Please go to Question 20A and 20B
- No ☐ Please continue to Question 21

**20A. If yes, how would you prefer to receive this information?** (Please check all that apply)

- Workshops ☐
- Presentations ☐
- Leaflets/booklets ☐
- Individual consultation ☐
- Internet ☐
- Other (please state in the box below) ☐

**20B. What type of information would be most useful for you regarding nutritional supplements and/or anti-doping?** For example, effective supplements/doses, doping concerns, the World Anti-Doping Code, how to read product labels, whether your needs are different to able-bodied athletes, other information.

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
21. How do you decide whether a supplement is safe to use? (Please check all that apply)
- It’s says on the label ☐
- I ask a sports nutritionist/ dietitian/ medical professional ☐
- I ask my coach/ teammates ☐
- I check the manufacturer’s website ☐
- I check a website that indicates which products have been tested for banned substances i.e., Informed-Sport ☐
- I do my own research using the internet, books, journals etc ☐
- No supplement is safe ☐
- N/A (I don't use supplements) ☐
- Other (Please state in the box below) ☐

22. Who/ What do you currently use to help you make a decision about your use of supplements? Please only rank up to 5 responses, 1=Your most used source, 2= your second most used source, 5= Only used a little/ sometimes. If you only use 2, 3 or 4 sources, only rank 1 down to 2, 3 or 4.
E.g. if you use a physiotherapist most often for information on supplements, write a number 1 in the box opposite and so on, up to a maximum of 5.
Note - The numbers 1, 2, 3, 4 and 5 should only occur once in your answers and therefore some options will be left blank.
Please ask for help if you are at all unsure about this question!

<table>
<thead>
<tr>
<th>Source</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training partner/athlete</td>
<td></td>
</tr>
<tr>
<td>Coach</td>
<td></td>
</tr>
<tr>
<td>Friends/family</td>
<td></td>
</tr>
<tr>
<td>Physiotherapist</td>
<td></td>
</tr>
<tr>
<td>Sports nutritionist/ dietitian</td>
<td></td>
</tr>
<tr>
<td>Doctor/medical professional</td>
<td></td>
</tr>
<tr>
<td>Supplement/ health food store</td>
<td></td>
</tr>
<tr>
<td>*Books/ magazines</td>
<td></td>
</tr>
<tr>
<td>*Evidence-based/ scientific journals</td>
<td></td>
</tr>
<tr>
<td>*Internet/ websites</td>
<td></td>
</tr>
<tr>
<td>*Other</td>
<td></td>
</tr>
</tbody>
</table>

22A. If you checked a box with an *, where possible please indicate which books, magazines, journals, websites or ‘other’ that you use.

23. Do you have access to a sports nutritionist/ dietitian through your sport/ team?
- Yes ☐
- No ☐

24. Have you ever seen a registered sports nutritionist/ dietitian in person for advice?
- Yes ☐ Please go to Question 24A
- No ☐ Please go to Question 25
24A. How often do you see them?
Very frequently ☐
Frequently ☐
Occasionally ☐
Rarely ☐
Very rarely ☐

25. In your opinion, do you need the same supplements as an able-bodied individual competing in a similar version of your sport?
Yes, I need the same type of supplements ☐
No, I have different nutritional requirements ☐
Yes, I need the same type of supplements but different amounts ☐
Other (Please state in the box below) ☐

26. How do you decide how much of a supplement to take? (Please only check 1 box)
I calculate it based on my body weight ☐
I am told/given it by the sports nutritionist/dietitian ☐
I follow the instructions on the label/manufacturers website ☐
Unsure ☐
N/A – I don’t use supplements ☐
Other (Please state in the box below) ☐

The following section relates to YOUR personal opinions regarding nutritional supplements and anti-doping.

27. Do you think all nutritional supplements that are commercially available on the market have been scientifically tested and are therefore safe to use?
Yes ☐
No ☐

28. Do you think there is a health risk associated with taking supplements?
Yes, all supplements carry a health risk ☐
Some supplements have health risks ☐
No, no supplements carry a health risk ☐
29. Who provides the most trusted source of information on nutritional supplements? You do not necessarily have to use these sources but you believe they are trustworthy. Please only rank up to 5 responses, 1 = Your most trusted source, 2 = your second most trusted source and so on. If you only trust 2, 3 or 4 sources, only rank 1 down to 2, 3 or 4.

**Note** - The numbers 1, 2, 3, 4 and 5 should only occur once in your answers and therefore some options will be left blank.

Please ask for help if you are at all unsure about this question!

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<td>Sports nutritionist/dietitian</td>
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<td>Doctor/medical professional</td>
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<td>Supplement/health food store</td>
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<tr>
<td></td>
<td>*Books/magazines</td>
</tr>
<tr>
<td></td>
<td>*Evidence-based/scientific journals</td>
</tr>
<tr>
<td></td>
<td>*Internet/websites</td>
</tr>
<tr>
<td></td>
<td>*Other</td>
</tr>
</tbody>
</table>

29A. If you checked a box with an *, where possible please indicate which books, magazines, journals, websites or ‘other’ that you use.

30. Do you think doping agents have the potential to improve sports performance?

Yes ☐

No ☐

31. If you would definitely not be caught, would you risk your health for any performance gains that may come with taking doping agents?

Yes ☐

No ☐

Maybe ☐

32. Which (if any) of the prohibited substances/methods do you believe has the greatest potential to improve performance in your sport? (This is not saying you would use it, just that you believe it would aid performance in your sport). (Please only check 1 box).

Stimulants *e.g. amphetamines* ☐

Anabolic-androgenic steroids *e.g. nandrolone* ☐

Diuretics and masking agents to prevent detection ☐

Blood doping *e.g. EPO, blood reinfusion* ☐

Peptide hormones, growth factors and related substances ☐

Beta-2 agonists *e.g. clenbuterol* ☐

Hormone and metabolic modulators ☐

Anorectics and weight loss agents *e.g. sibutramine* ☐

Boosting ☐

Other substances/methods (Please state in the box below) ☐

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.
32A. How/ why do you believe this type of doping would improve your sports performance?

Please indicate to what extent you agree or disagree with the following statements:

33. ‘The more supplements I take, the better I will perform’.
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐

34. ‘Taking supplements gives me the competitive edge I need to win’.
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐

35. ‘I feel under pressure to use supplements’.
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐

36. ‘Exercise increases the need for supplements’.
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐

37. ‘There is a risk of consuming a banned substance when taking a supplement’.
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐

38. ‘I feel pressured to take nutritional supplements because my competitors/ opponents do’
   - Strongly disagree ☐
   - Disagree ☐
   - Neither agree nor disagree ☐
   - Agree ☐
   - Strongly agree ☐
Thank you for taking the time to complete this questionnaire, we greatly appreciate your assistance in helping us to further understand the nutritional supplement habits of disabled athletes.

Please don’t hesitate to contact us if you have any questions regarding the questionnaire or the overall study.

Please contact t.s.graham@lboro.ac.uk if you have any questions regarding this survey.