

Cultural adaptation for the portuguese pediatric population of the “AQUA” Questionnaire

Original Article

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Abstract

Introduction - Respiratory symptoms and allergic diseases remain under-diagnosed both in the general population and in athletes. The Allergy Questionnaire for Athletes (AQUA), for screening these pathologies, has been validated and translated into Portuguese language only for athletes age 16 years or over.

Objectives - This work aims to culturally adapt the AQUA questionnaire into the Portuguese pediatric population, for future use in athletes between 12 and 18 years old.

Material and Methods - Focus groups were held to evaluate the preservation of the construct and the correct understanding of phrases and expressions. These were made up of: (1) group of young Portuguese federated athletes between 12 and 18 years old, (2) caregivers of these young people, (3) teachers at the institution's school for the aforementioned ages and (4) group of experts in the areas of Sports Medicine, Pediatric Otorhinolaryngology and Immunoallergology.

Results - The original version of the instrument has 25 questions, to be answered by the athletes. The working group responsible for the adaptation reached a consensus taking into account the changes discussed in the focus groups, achieving semantic, idiomatic, experimental and conceptual equivalence, which guaranteed an accurate translation and adequate cultural adaptation.

Conclusions - With this work, the original version of the AQUA questionnaire has now been translated and adapted for use in athletes over 12 years of age.

Keywords: AQUA questionnaire; athletes; allergic diseases; pediatric otorhinolaryngology; Portuguese language.

Introduction

Asthma has a particularly high prevalence in athletes, reaching 54.8% among winter sports practitioners, swimmers, and marathon runners.¹ Additionally, allergic rhinitis is estimated to affect between 14.8–41.0% of athletes.^{2,3} A study used a logistic regression

model to evaluate the association between atopy and physical activity, and reported that the risk of asthma was 25-fold higher in atopic strength sports practitioners, 42-fold higher in atopic marathon runners, and 97-fold higher in atopic swimmers compared to healthy, non-atopic controls.⁴

Despite the high and increasing prevalence of allergic diseases among athletes, their diagnosis is frequently overlooked in sports medicine. The diagnostic assessment of allergy should play an important role in the clinical evaluation of athletes because allergies can affect the general health status, quality of life, and physical performance of this population. An accurate diagnosis of allergy and asthma is essential for developing an optimal management plan for athletes, which should consider safety issues, potential effects on drug performance, and compliance with the World Anti-Doping Agency's prohibited list of substances.⁵

The Allergy Questionnaire for Athletes (AQUA) is the first validated tool for screening allergies in athletes.¹ This questionnaire collects data on the sport discipline practiced, training intensity, and relevant habits. It is a simple and easy-to-use self-administered tool with a high positive predictive value (0.94) for identifying athletes who require additional allergy tests.¹ The initial questionnaire was validated and translated into European Portuguese by two independent translators, specifically for athletes over 16 years of age.¹

The aim of this study was to adapt the AQUA questionnaire for the pediatric population of Portuguese athletes over 12 years of age.

Materials and methods

This study was conducted at a tertiary pediatric hospital in Lisbon, Portugal, between September and December 2023. The institution's Research Ethics Committee approved the study. The team that developed the original version of the instrument authorized its translation and administration via e-mail. All procedures were conducted in accordance with the regulations established

by the relevant Research Ethics Committee and Declaration of Helsinki of the World Medical Association.

The adaptation process followed the steps recommended by Beaton et al.⁶ It involved the analysis of the original version (in English) and translation of the AQUA into European Portuguese by the original working group, followed by discussion in focus groups, adaptation of the European Portuguese version, approval by a group of experts, and validation by the team responsible for the original instrument. Four focus groups evaluated the integrity of the adaptation and correct interpretation of sentences and expressions. All participants signed an informed consent form before participating in the focus group sessions. The focus groups included: (1) parents or caregivers of competing athletes; (2) competing athletes; (3) teachers working with the analyzed age group; and (4) experts in pediatric otorhinolaryngology, allergy and immunology, and sports medicine. A total of eight athletes, 11 caregivers, two teachers (Portuguese and natural sciences), and five experts participated in the focus groups. The exclusion criteria were parents, caregivers, and athletes lacking oral and written proficiency in European Portuguese or unable to understand the objectives of the study or questionnaire.

The included athletes were between 12–15 years of age, mostly male, and participated in water polo, rugby, and soccer.

The original version of the instrument comprises 25 questions (Appendix 1) to be answered by athletes older than 16 years of age without the need for assistance from an adult. The culturally-adapted version can be answered by participants older than 12 years. This decision was based on the fact that athletes typically begin participating in competitive/federated sports at this age. Additionally, at this level of education, they are generally able to complete the questionnaire without the assistance of a teacher or caregiver. We defined an AQUA score ≥ 5 as having the highest predictive value for allergy.

Results

The research team, consisting of three experts in otorhinolaryngology, two in allergy and immunology, and one in sports medicine, jointly reviewed the original AQUA questionnaire (Appendix 1) and the Portuguese version adapted by the original working group (Appendix 2). This initial focus group developed the first European Portuguese version of the AQUA questionnaire adapted for athletes between 12–16 years of age. This version was then analyzed by the second focus group, which included the teachers, who reached a consensus on the proposed changes. The revised version was subsequently discussed by the group of experts, who developed the current version to be presented in the focus group of caregivers and athletes.

Participants in the pre-test focus groups (caregivers and athletes) were asked about their interpretation of the questionnaire items, any doubtful or ambivalent aspects, and any observations and suggestions for changes. The group continued discussing until no new information was presented. The team responsible for the adaptation reached a consensus based on the changes discussed in the focus groups to achieve semantic, idiomatic, experiential, and conceptual equivalence and to ensure an accurate translation and adequate cultural adaptation. This resulted in the pre-final consensus version of the instrument in European Portuguese.

The panel of experts decided to implement structural changes to the introductory text of the original version, which was lengthy and difficult for the study population, and did not clearly present the objectives of the questionnaire and instructions for completing it. Consequently, a new introductory text was created based on the previous one to explain the issue of allergic diseases in the 21st century, define the objective of the questionnaire and advantages of answering it, guarantee privacy, and provide instructions on how to answer the questions.

In the first version, the first page asked the athletes to provide their first name and

surname, place of birth, date of birth, and team. The group of experts determined that these data provided no additional diagnostic benefit and therefore excluded them from the final version. The new version asks the athletes about their place of residence and associated environmental exposure, age (rather than date of birth), weight, height, and sport discipline practiced (rather than the name of their team). The sport discipline option was included because some sports have different disciplines, each involving different types of training. For example, athletics is a sport that includes diverse disciplines, such as jumping and race walking.

Compared to the European Portuguese version originally developed by the authors (Appendix 2), the verbal construction of the body of the text was completely changed from the third person singular to the second person singular. The expression “training session” was changed to “training” throughout the questionnaire to increase the objectivity. In the questions where more than one option could be selected (4, 7, 13, 14, and 25), this information was mentioned in the body of the question, as opposed to Appendix 2. In question 7, we decided to change the conjunctive formulations “mother and father” and “mother or father” to “mother” and “father” separately. In question 8, the expression “tearing” was changed to “with tears.” In question 11, the expression “itchy skin eruptions” was replaced by “itchy red spots on the skin.” Question 14 of the original version had the response, “any of the above,” which was changed to “above,” with regard to: “shortness of breath, cough and/or itching of the throat following exercise.” The term “anti-doping” appears as “*antidopagem*” twice in the original version (questions 17 and 18). The focus groups indicated that this term was unfamiliar to the age groups studied. Therefore, in question 18, the word was left in English, i.e., “anti-doping,” a term that is more widely known. In question 17, the name of the “World Anti-Doping Agency” was maintained in Portuguese (*Agência Mundial Anti-dopagem*) as this is the official name of the

organization in Portugal, defined by decree. The acronym (WADA, AMAD in Portugal) was removed from the question because it does not appear again in the questionnaire and thus has no practical use. Furthermore, the official acronym of the agency in Portugal is AMA. Other minor changes are shown in Appendix 3.

The final version (Appendix 3), with changes to both the body of the questionnaire and instructions, was approved by consensus of the expert group and sent to the team responsible for the original instrument for review and formal approval.

Discussion

Although the prevalence of allergic diseases in athletes has been reported to be high in epidemiological studies, it may be underestimated due to the lack of routine screening in current sports medicine practice.¹ The AQUA, which is based on the European Community Respiratory Health Survey Questionnaire, was developed to address this deficiency in sports medicine practice. The questionnaire was adapted to the target population (athletes over 16 years of age) based on interviews with physicians, coaches, and athletes, and additional questions were included to define the type, duration, and intensity of training; identify allergic and infectious symptoms related to exercise; and describe the athlete's social habits (mainly smoking) and medication use (considering anti-doping regulations). AQUA questions 4–16 demonstrated a predictive value for allergic diseases (Appendix 1 and 2). The AQUA showed a high specificity (97.1%) and positive predictive value (94%) for the presence of allergy, but the sensitivity was only 58.3%. Although a lower threshold could be adopted to increase the sensitivity of the AQUA, depending on the specific reasons for administering the questionnaire, this would decrease its specificity for IgE-mediated allergy. For example, an AQUA score threshold ≥ 3 would increase its sensitivity to 70.0% but decrease its specificity to 83.8%.

The AQUA questionnaire is available in nine languages, and is a standardized tool for evaluating allergic diseases in athletes and comparing databases from different population studies. Its use has highlighted the high prevalence of allergies in athletes and the importance of managing allergies within the scope of sports medicine.^{7–9}

The AQUA was culturally adapted to maintain the psychometric properties of the original questionnaire, since a direct translation could result in misinterpretation due to cultural and language variations.⁶ The panel of experts in this study decided to adapt both the introductory text of the questionnaire and its 25 questions.

A limitation of this study is the lack of evaluation of the validity (discriminative capacity), reliability (item-scale correlations and internal consistency, and test-retest reliability), and response to clinical change of the AQUA. The validity of the instrument needs to be assessed to enable its use in clinical practice and research. This questionnaire is clinically important due to the high prevalence of allergic symptoms in the pediatric population and the increasing number of athletes in this age group. The clinical use of international instruments validated and adapted to the Portuguese culture enables the comparison of results between countries with different sociocultural contexts.

Another limitation of this study is that the analysis was limited to a single center in Lisbon. The analysis of data from centers from different continental and island regions could increase the reliability of the results as it would include participants with different backgrounds and provide direct contact with regional centers. Future studies should consider larger populations that include a greater number of athletes from various sport disciplines and different levels of training intensity. Larger populations will also include different asthma phenotypes and possible etiologies of rhinitis.

Conclusions

This study culturally adapted the AQUA questionnaire for the pediatric Portuguese population of athletes between 12–18 years of age.

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Conflict of Interests

The authors declare that they have no conflict of interest regarding this article.

Data Confidentiality

The authors declare that they followed the protocols of their work in publishing patient data.

Human and animal protection

The authors declare that the procedures followed are in accordance with the regulations established by the directors of the Commission for Clinical Research and Ethics and in accordance with the Declaration of Helsinki of the World Medical Association.

Privacy policy, informed consent and Ethics committee authorization

All the processed data were based in published reports that fulfilled privacy policy and ethical considerations.

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Scientific data availability

There are no publicly available datasets related to this work.

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Apêndice 1

AQUA© - Allergy Questionnaire for Athletes

Allergic diseases (bronchial asthma; rhinitis; conjunctivitis; eczema, urticaria and dermatitis; allergic and anaphylactic reactions to drugs, foods, and insect venoms; etc.) represent a third millennium epidemic based on their increasing prevalence, particularly in industrialized countries. The high prevalence of these diseases (25–40% of the population) has led the World Allergy Organization to call for specific actions aimed at diagnosis and prevention (www.ginasthma.com; www.whiar.com; www.goldcopd.com).

Studies performed in several national Olympic delegations have shown that allergic diseases occur frequently in elite athletes, with a prevalence of asthma even higher than that recorded in the general population. Moreover, allergic diseases are often associated with infections, particularly of the upper respiratory tract. Although allergic diseases do not prevent excellence in sports, the lack of diagnosis may influence the quality of competitive physical performance. The treatment of allergic diseases in athletes should be based on using safe medications that will not affect performance (without side effects on the cardiovascular and nervous system, etc.) and which are permitted by the current anti-doping regulations (www.wada-ama.org). This survey is part of an international project involving 24 European Centers of Excellence in allergic diseases (www.ga2len.net), which, with the support of the European Community, aims at prevention and treatment of allergy. Participation in the survey is certainly helpful for the health of athletes. The survey respects privacy needs and does not influence any decision about the identity of participants to sports activity.

First name Surname
Place of birth City of Residence
Phone (optional) Weight Height
Sport Team

- 1) How many times a week do you train? Up to 3 times More than 3 times.
- 2) Every training session usually lasts: 1–2 hours. 2–3 hours. More than 3 hours.
- 3) Do you mainly train: outdoor. indoor.
- 4) Did any doctor diagnose you an allergic disease? No. Yes.
If yes, which ones?
 Asthma. Rhinitis. Conjunctivitis. Urticaria. Eczema. Drugs allergy. Food allergy.
 Insect venom allergy (bees, wasps). Anaphylaxis.
- 5) Do you suspect to suffer from allergy, independently from any medical diagnosis? No. Yes.
- 6) Did you ever use anti-allergic drugs (antihistamines, topical steroids, “allergy vaccines”)? No. Yes.
- 7) Is there any allergic subject in your family?
 No. Yes, mother and father. Yes, mother or father. Yes, other relatives.
- 8) Have you frequently red eyes with tearing and itching? No. Yes.
- 9) Do you frequently sneeze, have a running, itchy nose (apart from colds)? No. Yes.
- 10) Did you ever feel tightness of your chest and/or wheeze? No. Yes.
- 11) Have you ever had itchy skin eruptions? No. Yes.
- 12) Have you ever had severe allergic or anaphylactic reactions? No. Yes.
- 13) Have you ever had shortness of breath, cough and/or itching of the throat following exercise?
 No. Yes.
If yes, you have more difficulties:
 At the beginning of the training session. At the end of the training session.
 During the whole training session.

14) If you suffered from any of the above, did these symptoms occur:

- Mainly outdoor. Mainly indoor. Mainly in spring. Mainly in cold or humid conditions.
 Independently of any environmental condition.

15) Have you ever had allergic reactions to foods? No. Yes.

If yes, do you remember to which food?

16) Have you ever had allergic reactions to drugs? No. Yes.

If yes, do you remember to which drug?

17) Do you know that some drugs for allergic and respiratory diseases are prohibited or under restrictions by the World Anti-Doping Agency (WADA)? No. Yes.

If yes, think which substances, you think are included in this category:

- Antihistamines. Bronchodilators. Vasoconstrictors.
 Topical steroids (metered dose inhalers or inhaled powders).
 Dermatological steroid preparations. Injected or oral steroids.

18) Are you afraid that anti-allergic and/or respiratory drugs may worsen your performances or make you infringing anti-doping regulations? No. Yes.

19) Do you use any foods supplements (vitamins, amino acids, creatine)?

- No. Occasionally. Regularly.

20) Do you smoke? No. Yes.

If yes, how many cigarettes a day? Less than 5. 5-20. More than 20.

21) Did you use during the last year the following drugs and how often?

Drugs	Never	1-3 times	3-5 times	5-10 times	More than 10 times
Antibiotics	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Anti-inflammatory drugs	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Drugs for pain	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Drugs for fever	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Others <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

22) Did you use any drug during the last week? No. Yes.

If yes, which one?

23) Do you frequently suffer from upper respiratory infections (pharyngitis, bronchitis, colds) or fever?

- No. Yes. If yes, this infections are more frequent during overtraining periods? No. Yes.

24) Do you suffer for recurrent labial herpes?

- Never. 1-3 times per year. More than 3 times per year.

25) How many times in the last year you could not train because of infections?

- Never. 1-3 times. More than 3 times.

Apêndice 2

AQUA© - Questionário de Alergia para Atletas

As doenças alérgicas (asma brônquica; rinite; conjuntivite; eczema, urticaria e dermatite; reacções alérgicas e anafiláticas a medicamentos, alimentos e venenos de insetos; etc.) representam uma epidemia do terceiro milénio pelo seu aumento, particularmente em países industrializados. A elevada prevalência destas doenças (25-40% da população tem levado a acções específicas da Organização Mundial de Saúde (OMS) dirigidas ao seu diagnóstico e prevenção (www.ginasthma.com; www.whiar.com; www.goldcopd.com). Esta avaliação faz parte de um projeto internacional envolvendo 24 Centros Europeus de Excelência em doenças alérgicas (www.ga2len.net), que com o apoio da Comunidade Europeia a prevenção e tratamento da alergia. Estudos realizados em várias delegações Olímpicas nacionais têm mostrado que as doenças alérgicas são também muito frequentes em atleta de elite, com uma prevalência de asma ainda mais elevada do que a registada na população em geral. Além disso, as doenças alérgicas associam-se muitas vezes com infecções, particularmente do trato respiratório superior. Apesar das doenças alérgicas não impedirem a excelência no desporto, a falta de um diagnóstico pode influenciar a qualidade do desempenho competitivo. Adicionalmente, o tratamento das doenças alérgicas em atletas deve basear-se em medicamentos seguros que não afetam o rendimento (sem efeitos laterais no sistema cardiovascular e nervoso, etc.) e que são permitidos pelos atuais regulamentos anti-dopagem (www.wada-ama.org). Este inquérito faz parte de um projeto internacional envolvendo 24 Centros Europeus de Excelência em doenças alérgicas (www.ga2len.net), que, com o suporte da Comunidade Europeia, tem por objetivo a prevenção e tratamento da alergia.

Participar neste inquérito é certamente um auxílio para a saúde dos atletas, responde às necessidades de privacidade e não influencia qualquer decisão sobre a aptidão para a atividade desportiva.

Nome próprio	<input type="text"/>	Apelido	<input type="text"/>
Local de nascimento	<input type="text"/>	Data de nascimento	<input type="text"/>
Cidade de residência	<input type="text"/>	Telefone (opcional)	<input type="text"/>
Peso	<input type="text"/>	Altura	<input type="text"/>
Desporto	<input type="text"/>	Equipa	<input type="text"/>
		Código	<input type="text"/>

- 1) Quantas vezes treinas por semana? Até 3 vezes (treinos). Mais de 3 vezes (treinos).
- 2) Cada sessão de treino dura geralmente: 1-2 horas. 2-3 horas. Mais de 3 horas.
- 3) Treina sobretudo: no exterior. no interior.
- 4) Já algum médico lhe diagnosticou alguma doença alérgica? No. Yes.
Se sim, quais? (podes escolher mais do que uma opção)
 Asma. Rinite. Conjuntivite. Urticária. Eczema. Alergia a medicamentos.
 Alergia a alimentos. Alergia a insetos (abelha, vespas). Anafilaxia.
- 5) Suspeita sofrer de alguma alergia, independentemente de algum diagnóstico médico? No. Yes.
- 6) Já alguma vez usaste medicamentos anti-alérgicos (antihistamínicos, corticosteróides tópicos, “vacinas de alergia”)? No. Yes.
- 7) Há algum indivíduo com alergia na sua família?
 Não Sim, mãe e pai. Sim, mãe ou pai. Sim, outros familiares.
- 8) Tem frequentemente olhos vermelhos com lacrimejo e comichão No. Yes.
- 9) Espirra com frequência, com nariz a pingar e com comichão (sem ser nas constipações)? No. Yes.
- 10) Já alguma vez sentiu aperto no peito e/ou pieira (“chiadeira”)? No. Yes.
- 11) Já alguma vez teve erupções da pele com comichão? No. Yes.
- 12) Já alguma vez teve reacções alérgicas graves ou anafiláticas? No. Yes.

13) Já alguma vez teve falta de ar, tosse e/ou comichão na garganta após o exercício? No. Yes.

Se sim, tem mais dificuldade: (podes escolher mais do que uma opção)

No início da sessão de treino No final da sessão de treino Durante todo o treino.

14) Se sofreu de alguma das situações acima, os sintomas ocorreram:

Sobretudo no exterior Sobretudo no interior Sobretudo na primavera

Sobretudo em situações de frio e humidade Independentemente das condições do ambiente

15) Já alguma vez teve reacções alérgicas a alimentos? No. Yes.

Se sim, lembra-se a que alimento?

16) Já alguma vez teve reacções alérgicas a medicamentos? No. Yes.

Se sim, lembra-se a que medicamento?

17) Sabe que alguns medicamentos para as doenças alérgicas e respiratórias são proibidos ou são restringidos pela Agência Mundial Anti-Dopagem (AMAD)? No. Yes.

Se sim, indique que substâncias pensa que estão incluídas nessa categoria:

Anti-histamínicos. Broncodilatadores. Vasoconstritores.

Corticosteróides tópicos (inaladores pressurizados ou em pó).

Preparações Dermatológicas com corticosteróides. Corticosteróides injetados ou orais.

18) Tem receio que os medicamentos anti-alérgicos e/ou para doenças respiratórias possam piorar o seu rendimento ou infringir os regulamentos anti-dopagem? No. Yes.

19) Usa alguns suplementos alimentares (vitaminas, amino ácidos, creatina)?

Não. Ocasionalmente. Regularmente.

20) Fumas? No. Yes.

Se sim, quantos cigarros por dia? menos de 5. 5-20. mais de 20.

21) Utilizou no último ano os seguintes medicamentos e quantas vezes?

Medicamentos	Nunca	1-3 vezes	3-5 vezes	5-10 vezes	Mais de 10 vezes
Antibióticos	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Anti-inflamatórios	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Medicamentos para a dor	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Medicamentos para a febre	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Outros <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

22) Sofre frequentemente de infecções respiratórias (faringite, bronquite, constipações) ou febre?

No. Yes. Se sim, qual?

23) Sofre frequentemente de infecções respiratórias (faringite, bronquite, constipações) ou febre?

No. Yes.

Se sim, estas infecções são mais frequentes durante períodos de treino intensivo? No. Yes.

24) Sofre de herpes labial recorrente? Nunca. 1-3 vezes por ano. Mais de 3 vezes por ano.

25) Quantas vezes, no último ano, não pode treinar devido a infecções?

Nunca. 1-3 vezes. Mais do que 3 vezes.

Apêndice 3

AQUA© - Questionário de Alergia para Atletas

As doenças alérgicas (asma brônquica; rinite; conjuntivite; eczema, urticaria e dermatite; reacções alérgicas e anafiláticas a medicamentos, alimentos e venenos de insetos; etc.) são uma epidemia do século XXI pelo seu aumento, particularmente em países industrializados. Este questionário tem como objetivo o rastreio de doenças alérgicas em atletas. Participar neste inquérito é uma ajuda para a saúde dos atletas, responde às necessidades de privacidade e não influencia qualquer decisão sobre a aptidão para a atividade desportiva. Este questionário deve ser preenchido individualmente pelos jovens atletas, com idade igual ou superior a 12 anos. Deverá ser selecionada apenas uma opção para cada pergunta, excepto nas perguntas onde está escrito que podem ser selecionadas várias opções.

Local de residência Peso Altura
Desporto/modalidade
Idade Código

- 1) Quantas vezes treinas por semana? Até 3 vezes. Mais de 3 vezes.
- 2) Cada treino dura geralmente: 1-2 horas. 2-3 horas. Mais de 3 horas.
- 3) Treinas principalmente: no exterior. no interior.
- 4) Já te diagnosticaram alguma doença alérgica? No. Yes.
Se sim, quais? (podes escolher mais do que uma opção)
 Asma. Rinite. Conjuntivite. Urticária. Eczema. Alergia a medicamentos.
 Alergia a alimentos. Alergia a insetos (abelha, vespas). Anafilaxia.
- 5) Achas que tens alguma alergia? No. Yes.
- 6) Já alguma vez usaste medicamentos anti-alérgicos (antihistamínicos, corticosteróides tópicos, “vacinas de alergia”)? No. Yes.
- 7) Há alguém na tua família, com alergia? No. Yes.
Se sim quem? (podes escolher mais do que uma opção) Mãe. Pai. Outros familiares.
- 8) Tens frequentemente olhos vermelhos com lágrimas e comichão? No. Yes.
- 9) Espirras com frequência, com nariz a pingar e com comichão (sem estares constipado)? No. Yes.
- 10) Já alguma vez sentiste aperto no peito e/ou pieira (“chiadeira”)? No. Yes.
- 11) Já alguma vez tiveste manchas vermelhas na pele com comichão? No. Yes.
- 12) Já alguma vez tiveste reacções alérgicas graves ou anafiláticas? No. Yes.
- 13) Já alguma vez tiveste falta de ar, tosse e/ou comichão na garganta após o exercício? No. Yes.
Se sim, tens mais dificuldade: (podes escolher mais do que uma opção)
 No início do treino. No final do treino. Durante todo o treino.
- 14) Se tens falta de ar, tosse e/ou comichão na garganta após o exercício, as queixas acontecem: (podes escolher mais do que uma opção)
 mais vezes no exterior. mais vezes no interior. mais vezes na primavera.
 mais vezes em situações de frio e humidade. independentemente do local do treino.

15) Já alguma vez tiveste alergia a alimentos? No. Yes.

Se sim, lembraste a que alimento?

16) Já alguma vez tiveste alergia a medicamentos? No. Yes.

Se sim, lembraste a que medicamento?

17) Sabes que alguns medicamentos para as doenças alérgicas e respiratórias são proibidos ou são restringidos pela Agência Mundial Anti-Dopagem? No. Yes.

Se sim, indica que medicamentos achas que estão incluídos nesta categoria:

Anti-histamínicos. Broncodilatadores. Vasoconstritores.

Corticosteróides tópicos (inaladores pressurizados ou em pó).

Preparações Dermatológicas com corticosteróides. Corticosteróides injetados ou orais.

18) Tens medo que os medicamentos anti-alérgicos e/ou para doenças respiratórias possam piorar o teu rendimento ou ir contra os regulamentos anti-doping? No. Yes.

19) Usas alguns suplementos alimentares (vitaminas, amino ácidos, creatina)?

Não. Às vezes. Regularmente.

20) Fumas? No. Yes. Se sim, quantos cigarros por dia? menos de 5. 5-20. mais de 20.

21) Usaste no último ano os seguintes medicamentos e quantas vezes?

Medicamentos	Nunca	1-3 vezes	3-5 vezes	5-10 vezes	Mais de 10 vezes
Antibióticos	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Anti-inflamatórios	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Medicamentos para a dor	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Medicamentos para a febre	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Outros <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

22) Usaste algum medicamento durante a última semana? No. Yes.

Se sim, qual?

23) Tens muitas vezes infecções respiratórias (faringite, bronquite, constipações) ou febre?

No. Yes.

Se sim, estas infecções são mais frequentes durante períodos de treino intensivo? No. Yes.

24) Tens herpes labial recorrente? Nunca. 1-3 vezes por ano. Mais de 3 vezes por ano.

25) Quantas vezes, no último ano, não pudeste treinar por causa de infecções?

Nunca. 1-3 vezes. Mais do que 3 vezes.