Supplemental material

1 Supplement 1 Additional information on the intervention Runfitcheck

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3	The Runfitcheck was developed in 2016 according to an evidence- and practice-based approach to
4	stimulate injury preventive behaviour amongst novice runners (1,2). Although the intervention has
5	been described in detail in the aforementioned articles, after the first evaluation of the intervention,
6	some adjustments were made based on the users' feedback.
7	The Runfitcheck starts with a few basic, newly developed, questions classifying the runner based on
8	their running motivation, physical complaints and load-taking capacity. Based on these questions, the
9	runner directly receives tailored advice consisting of: 1) their running profile, consisting of percentage
10	match to a health-oriented, mental runner, social runner and goal-oriented runner; 2) information about
11	their injury risk; and 3) advice on their running profile in combination with the injury risk and the pitfalls.
12	Next, the runner is directed to a personal dashboard for achieving optimal running practice. This
13	dashboard consists of a training schedule, a warming-up routine through an instruction video and
14	instruction videos of strength exercises. The training schedules were adapted to their running goal. A
15	new addition to the dashboard is information on how to listen to your body's signals in terms of pain
16	signals, fatigue, recovery and resting heart rate. This information was developed in consultation with
17	running experts.
18	
19	References
20	
21	1. Kemler E, Cornelissen MH, Gouttebarge V. Is it possible to stimulate injury-preventive
22	behaviour in adult novice runners with an online intervention? Results of a randomized
23	controlled trial. South African Journal of Sports Medicine. 2020;submitted.
24 25	2. Kemler E, Gouttebarge V. A Tailored Advice Tool to Prevent Injuries Among Novice Runners:
25	Protocol for a Randomized Controlled Trial. JMIR Res Protoc. 2018;7(12):1.

- 26
- 27
- 28

Supplement 2 Baseline questionnaire Runfitcheck

Navigation block 1: Welcome

Dear runner,

Thank you for your interest in participating in research on injuries in novice runners!

VeiligheidNL is conducting this study in collaboration with Le Champion and the Athletics Union. During this study we will follow you and monitor your running activities over a period of 16 weeks and any physical complaints or injuries that you have suffered as a result of these activities. We will sent you a short questionnaire once every two weeks by e-mail. You will receive a more extensive questionnaire at the beginning, after 8 weeks, and at the end of the study period.

The aim of the research is to gain insight into running and other sports activities, injuries and injury prevention behaviour of runners in order to ultimately prevent injuries among runners.

After you have read the information on the next page and given permission (informed consent) to participate in the study, we will start with the first questionnaire. It takes about 5 to 10 minutes to complete. We start with a pre-selection, to see if you belong to our target group.

Among the participants in the study, six running prizes worth 50 euros will be raffled off. This will be done at the end of the survey when all questionnaires have been completed. For more information see: Disclaimer Research Running

Please note! When you stop filling out the questionnaire in between, your data will not be stored. So fill in the questionnaire completely at once.

Privacy

For sending the questionnaires in the study we will use your e-mail address. Your e-mail address and other data will be processed confidentially; the results will not be traceable to you as a person. Each respondent will have a unique code that is linked to your data. The entered anonymous data will be kept for 15 years and then destroyed.

Participation in the study is voluntary. You may stop participating in this study at any time, without reason. The data collected up to that point will be used for the study. You can stop by sending an email to (one of) the following researchers of VeiligheidNL:

- Henrike van der Does (<u>h.vanderdoes@veiligheid.nl</u>)
- Ellen Kemler ()

When you have any questions about the study, don't hesitate and ask them by e-mail.

Permission statement

- I have read the information about the study and had the opportunity to ask questions. I have had enough time to decide if I wanted to participate.

- I know that participation is voluntary and that I can decide at any time not to participate anymore. I don't have to give a reason for that.
- I consent to the collection and use of my data in the manner and for the purposes mentioned. I give permission to keep my anonymous data for another 15 years after this study for further research into running, running injuries and sports injury prevention.
- I want to participate in this study.
 - ➔ I hereby give permission for participation in the study and (re) analysis of my data.

Navigation block 2: Target group

We are very happy that you want to participate in this study! We will start with asking you several questions about you and your running experience to determine if you belong to our target group.

To what extent do you run?

- Running is a 'main sport' for me (the most important sport)
- Running is a ' for me side sports' (I also do other sports)
- I'm going to start running soon

What is your age?

0

0

- Younger than 18 years
- 18 to 24 years
- o 25 to 34 years
- o **35 to 44 years**
- 45 to 54 years
- o **55 to 64 years**
 - 65 years or older

If answer $'<18' \rightarrow$ (exclude) If Leeftijd_jonger_18 go to Referral from start exclusion

.

How many months of running experience have you gained in the last five years?

- \circ $\;$ None, but I do plan to start running soon
- \circ $\;$ Less than 6 months
- 6 to 12 months (0.5-1 year)
- 13 to 18 months (1-1.5 years)
- 19 to 24 months (1.5-2 years)
- More than 24 months (2 years)

How do you assess your own running experience?

- Inexperienced (beginner)
- o Little experienced
- Somewhat experienced
- Experienced (advanced)
- Very Experienced (expert)

In response >12 months of running experience and (very) experienced running level \rightarrow go to page 24 (exclude)

Inclusion

You belong to our target group and we are happy to continue the study with you!

In order to be able to send you the following questionnaires, we would like to receive your e-mail address.

Your e-mail address will not be used for purposes other than participation in this study and for contact about the possible incentive. Your personal data will be processed by one researcher and stored in a secure environment.

After entering your e-mail address, click on 'Next' to continue the questionnaire.

E-mail address:

Navigation block 3: General questions

How did you end up with this study?

- Through a call on social media
 - Through registration for the Zandvoort Circuit Run, number of km:
 - Through registration for a running event, namely (name of event + number of km):
 - In a different way, namely:

Following are some questions about your demographics. What is your gender?

- Male
- Female
- Other

What is your height in centimeters?

..... Cm

What is your weight in kilograms?

..... Kg Don't want to answer

We would like to know how you physically strain your body through running. Following are some questions about this subject.

How many times a week do you on average exercise currently?

 \circ $\,$ N/A, I'm not working out at the moment but I'm going to start

 \rightarrow go to page 8; capacity questions

- \circ $\;$ Less than 1 time per week
- 1 time per week
- 2 times a week
- 3 times a week
- 4 or more times a week

How long (in minutes) do you exercise on average at a time? Enter 0 minutes if you are not currently exercising.

..... minutes

How many times a week do you on average run currently ?

- N/A, I haven't started running yet
- Less than 1 time per week
- \circ 1 time a week
- o 2 times a week
- o 3 times a week
- \circ 4 or more times a week

In addition to load, capacity is also relevant. We'll ask you some questions about that now. How is your condition?

1 stands for	· not go	od at a	ll and 1	10 for v	ery ve	ry good				
	1	2	3	4	5	6	7	8	9	10

How prone to injuries are you?

How often and how quickly you suffer from an injury or other physical complaints (e.g. aches and pains)?

1 stands for non-injury prone and 10 for very injury prone 1 2 3 4 5 6 7 8 9 10

To clarify the definitions in the questions, below are the definitions of an injury and a physical complaint:

An <u>injury</u> is defined as an event during exercise after which the athlete must stop his or her sports activity or is unable to start a subsequent sports activity. A <u>physical complaint</u> is defined as another pain complaint, which does not fall under the definition of an injury.

Do you currently suffer from an injury or physical complaint caused by running?

- Yes, I suffer from an injury of physical complaint caused by running
 - go to page 10 No, but T do suffer from an injury or 0 physical complaint caused by another sport \rightarrow go to page 10 T not suffer from physical 0 No, do an injury or
 - complaint

Go to Referral from no injury, complaint

• Not applicable, I haven't started running yet

→ go to page 15 Go to Referral from no trouble injury, complaint

Navigation block 4: Injury and complaint

Following are some questions to gather more information about your injury or physical complaint.

Have you been suffering from this injury or physical complaint for more than three months?

- o Yes
- o No

To what extent are you currently bothered by this injury or physical complaint while running? *Do you currently have difficulties participating in normal training and competition due to injury or a physical complaint?*

- Fully participated, without health problems
- Fully participated, but with injury / physical complaint
- Reduced participation due to injury / physical complaint
- Cannot participate due to injury/physical complaint

To what extent have you currently reduced your training volume due to injury or physical complaint?

- $\circ \quad \text{No reduction} \quad$
- To a minor extent
- \circ $\,$ To a moderate extent
- \circ $\,$ To a major extent $\,$
- \circ I haven't been able to train at all

To what extent do you currently notice that the injury or physical complaint affects your running activities / performance?

- No effect
- \circ $\,$ To a minor extent $\,$
- \circ $\,$ To a moderate extent
- \circ $\,$ To a major extent $\,$
- I haven't been able to train at all

To what extent do you currently suffer from the symptoms of this injury or physical complaint?

- No symptoms/health complaints
- \circ To a mild extent
- \circ To a moderate extent
- To a severe extent

If all questions show no complains or bother go to [Referral from no injury complaint]

Where is the physical complaint/injury located?

- Upper body / upper extremities
- \circ Lower back
- o Pelvis
- o Hip
- \circ Groin
- Thigh front
- $\circ \quad \text{Thigh back} \\$
- o Knee
- o Tibia
- o Calf
- $\circ \quad \text{Achilles tendon} \quad$
- o Ankle
- o Foot
- o Toes

What is the nature of the physical complaint/injury sustained?

- o Bruise or bruising
- Muscle or tendon injury; (partial) rupture of a muscle
- Muscle or tendon injury; strain on muscle or tendon without sudden rupture
- Muscle or tendon injury; don't know what exactly
- Sprain, twisting or ligament injury; (partial) rupture of a ligament
- Sprain, twisting or ligament injury; twisting joint
- Sprain, twisting or ligament injury, don't know what exactly
- Acute bone fracture (e.g. fracture only due to sprain)
- Bone fracture; bone overload (e.g. fatigue fracture / stress fracture)
- Dislocated joint
- Nerve tightness (e.g. back hernia)
- o Unknown
- Otherwise namely;

Have you been treated by a (para)medic for the physical complaint / injury? (multiple answers possible)

- o No
- Yes, by a general practitioner
- Yes, by a sports physician
- Yes, by a physiotherapist
- Other, namely:

Referral from no injury, complaint

Navigation block 5: Behavior

To prevent injuries, various aspects are important. We are curious to what extent you have experience with these aspects. First of all, some questions about your knowledge of injury (prevention).

<u>General</u>

Do you disagree or agree with the following statements?

- I know where to find information and advices on what to do if I experience physical complaints due to or while running
- I know where to find information and advice on how to prevent running injuries
- I know where to go for treatment when I have an injury
- \circ $\;$ There are measures that help to prevent running injuries
- $\circ~~$ I know what to do to prevent running injuries

<u>Fatigue</u>

Do you disagree or agree with the following statements?

- Prolonged mental fatigue increases the risk of injury
- If I am mentally tired from a long day of meetings at work or a day of studying, the risk of injuries is higher
- $\circ~$ If I'm still physically tired from the previous training, it is better to postpone running for another day

Recovery and running apps and schedules

Do you disagree or agree with the following statements?

- After 48 hours of rest I have recovered sufficiently from running
- I know what measures help to recover after running
- Following a running schedule is more important to prevent injuries than listening to my body
- I can prevent a lot of running injuries by a good load build-up in my training schedule

Resting heart rate

Do you disagree or agree with the following statements? Answer options: disagree, agree.

- \circ $\,$ My $\,$ average resting heart rate indicates how prone I am to injury $\,$
- I know when I need to adjust my running training based on the value of my resting heart rate

<u>Pain</u>

Do you disagree or agree with the following statements?

- \circ In case of acute pain, it is often best to stop running
 - In case of muscle strain the day after a running training, I have to postpone the next training at least 1 day
- $\circ~$ If pain disappears quickly at the beginning of training, it doesn't hurt to keep walking and finish the training session

Now some questions about your injury awareness are asked. Do you disagree or agree with the following statements?

- Runners are more likely to get injured than other sports athletes
- Novice runners are more likely to get injured than experienced runners
- Runners are more likely to suffer a serious injury than other sports athletes

The extent to which you think you can prevent injuries is also important and is measured with the following statements.

To what extent do you agree with the following statements?

Indicate on a scale from 1 to 10.

1 stands for completely disagree and 10 stands for completely agree.

- If I feel a running injury emerging, I am in a position to take measures to prevent worse
- \circ $\;$ I sometimes keep on going too long while experiencing a running injury
- $\circ~$ I can well estimate whether I can continue to exercise with a running injury
- o I can well estimate whether I need medical treatment for a running injury
- If I suffer from a running injury I can properly assess how serious this injury is
- I am able to listen to the signals of my body before, during and after running

Your attitude towards injuries is also important. We measure attitude with the questions below.

To what extent do you agree with the following statements? Indicate on a scale from 1 to 10.

1 stands for completely disagree and 10 stands for completely agree.

- I think it's important to take measures to prevent running injuries
 - o Running injuries happen no matter how careful you are
 - Most running injuries aren't that serious
 - Information about running injuries only makes me afraid of getting an injury.

Navigation block 6: Injury prevention behaviour

We would like to know what actions you are currently taking to prevent running injuries. Indicate below what you are currently doing to prevent running injuries. Enter not applicable (N/A) if you have not yet started running.

Answer options: never, rarely, sometimes, often, always, N/A (I haven't started running yet)."

- A short warm-up (consisting of slowly running for 5 to 10 minutes followed by some stretching exercises)
- 2 to 3 times a week muscle strengthening exercises
- Exercises to improve my running technique
- Regularly changing running surfaces
- Training with a running group
- Listening to my body (e.g. delaying training in case of aches and pains or taking it easy)
- Using a personal running schedule (tailored to my running capacity)
- Using a general running schedule
- Wearing ankle brace/knee brace
- \circ Wearing compression socks
- Good training structure (consisting of gradually building up the intensity and extent of the training to work on a better condition)

• Another injury prevention measure (fill in below)

What other injury prevention measures do you take? If you have not filled in the answer option 'Other injury prevention measure' above, you can skip this question.

Skip question

If not [Blesprev_gedrag] [Spierverst_oef] contains 'rarely, sometimes, often, always' go to Referral from beginning exclusion

Can you indicate which muscle strengthening exercises you do? Can you indicate for each muscle-strengthening exercise how many minutes you do them at a time? Can you indicate per muscle strengthening exercises how often you do these per week?

\rightarrow go to page 26

Reference from the beginning of exclusion

Navigation block 7: Closure

If [Age] [Jonger_18 years] go to Exclude If Running experience = Maand_13_18 OR Maand_19_24 OR Maand_meer_24 AND Running level = Experienced OR Zeer_ervaren go to Exclude

If Blesprev_gedrag → *Anders* = *never*, *rarely*, *sometimes*, *often*, *always*, *n/a go to Dank*

Unfortunately, you do not belong to our target group of novice runners and you cannot participate in the study.

Thank you very much for your interest in the study and good luck with your running activities!

Do you have any further questions and/or comments? Then place it below. If you don't have any questions or comments, you can skip this question.

Skip this question

If you would like to contact our researchers directly, please send an e-mail to Henrike van der Does or Ellen Kemler.

- Henrike van der Does (<u>h.vanderdoes@veiligheid.nl</u>)
- Ellen Kemler (<u>e.kemler@veiligheid.nl</u>)

Go to the next page and click 'Exit' to close the survey.

→ go to page 27 Go to End_vragenlijst

Thank you for completing this questionnaire!

Within two weeks you will receive the first fortnightly questionnaire to monitor your running activities and injuries.

Do you have any further questions and/or comments? Then place it below. If you don't have any questions or comments, you can skip this question.

Skip this question

If you do not want to participate in the running prize giveaway and/or you want to contact our researchers directly for another reason, please mail to Henrike van der Does or Ellen Kemler.

- Henrike van der Does (<u>h.vanderdoes@veiligheid.nl</u>)
- Ellen Kemler (<u>e.kemler@veiligheid.nl</u>)

Go to the next page and click on 'Exit' to send the questionnaire.

This is the end of the questionnaire.

Supplement 3 Health Monitor Runfitcheck

HEALTH MONITOR

Welcome

Dear Runner,

Welcome to your health monitor; a short questionnaire, every two weeks, to monitor your runningrelated physical complaints and injuries.

In this short questionnaire we look back at what you have done in the past two weeks, and whether you have suffered from injuries or physical complaints that have affected your running in the past two weeks.

It takes 10 to 90 seconds to complete (depending on your physical complaints).

Thanks in advance for filling in the questions!

Sports exposure

How many times have you been running in the last two weeks? Please enter a number and if you did not run enter 0 times

How many minutes did you run on average at a time? minutes

Have you done any other sports in the past two weeks?

- o Yes
- o No

What other sport(s) have you done (besides running) in the last two weeks?

- o Volleyball
- Football
- o Hockey
- o Basketball
- Fitness
- Cycling
- TennisOtherwise.....

How many minutes have you done these sport(s) in TOTAL in the last two weeks? minutes

Why haven't you run in the last two weeks?

- Due to physical complaint / injury
- Aother reason namely;

Basis health questions

Now four questions about physical complaints (injuries or illness) that you have suffered during running in the past 2 weeks will be asked.

If you have not had any complaints, indicate that you did not have them in the four questions.

If you have suffered from multiple illnesses, injuries or physical complaints, think of the complaint that you have suffered the most from in the past two weeks.

Answer the next four questions about this physical complaint.

At the end of the questionnaire you will be given the opportunity to indicate another physical complaint.

Please do not indicate physical complaints that have to do with muscle pain.

Have you experienced any injury, illness or other health problems while running in the past two weeks?

- o Fully participated, without health problems
- o Fully participated, but with injury / physical complaint
- o Reduced participation due to injury / physical complaint
- o Cannot participate due to injury/physical complaint

To what extent have you reduced your training volume in the past two weeks due to an injury, illness or other health problems?

- o No reduction
- o To a minor extent
- To a moderate extent
- $\circ \quad \text{To a major extent} \quad$
- I haven't been able to train at all

To what extent have you noticed that injuries, illnesses or other health problems have affected your running activities in the past two weeks?

- The performance was not affected
- The performance was **slightly** affected
- o The performance was moderately affected
- The performance was much influenced
- I have **not been** able to run at all

To what extent have you suffered from the symptoms of the injury, a physical complaint or health problems in the past two weeks?

- o I had no physical complaints
- o I had **somewhat** physical complaints
- o I had moderate physical complaints
- o I had many physical complaints

Follow-up health questions

How many days in the past two weeks have you not or partly been able to participate in running due to the physical complaint / injury? days

Is this the first time you have reported this physical complaint in this study?

- o Yes
- o No, I have reported the same physical complaint / injury in the previous health monitor
- o No, I have reported the same physical complaint / injury before but that is longer ago

When did your injury/ complaint start? >> Indicate the date in the calendar.

Does the problem which caused you pain or nuisance these two weeks concern a physical complaint / injury or an illness?

- Physical complaint / injury
- o Illness

Follow-up injury

If you suffer from multiple complaints/injuries, answer the following questions about your main physical complaint/injury. At the end you will have the opportunity to indicate a second physical complaint / injury.

Is this a recurrent injury?

A recurrent injury refers to an injury that occurs again on the same part of the body on the same side of the body.

- o Yes
- **No**

Where is the physical complaint / injury located? Upper body / upper extremities

- o Lower back
- o Pelvis
- o Hip
- Groin
- Thigh front
- Thigh backKnee
- Knee
 Tibia
- Calf
- Achilles tendon
- o Ankle
- o Foot
- o Toes

What is the nature of the physical complaint/injury sustained?

- o Bruise or bruising
- Muscle or tendon injury; (partial) rupture of a muscle
- o Muscle or tendon injury; strain on muscle or tendon without sudden rupture
- Muscle or tendon injury; don't know what exactly
- Sprain, twisting or ligament injury; (partial) rupture of a ligament
- o Sprain, twisting or ligament injury; twisting joint
- Sprain, twisting or ligament injury, don't know what exactly
- Acute bone fracture (e.g. fracture only due to sprain)
- Bone fracture; bone overload (e.g. fatigue fracture / stress fracture)
- Dislocated joint
- Nerve tightness (e.g. back hernia)
- o Unknown
- o Otherwise namely;

Have you been treated for this physical complaint / injury by a (para)medic in the past two weeks?

Multiple answers possible

- o No
- o Yes by general practitioner
- Yes by sports doctor
- Yes by physiotherapist
- o Otherwise, namely:

Have you suffered from another physical complaint / injury in the past two weeks?

- o Yes
- **No**

When did your injury/ complaint start? >> indicate the date of onset in the calendar

Is this a recurrent injury?

A recurrent injury refers to an injury that occurs again on the same part of the body on the same side of the body.

- o Yes
- **No**

Where is the physical complaint / injury located? Upper body / upper extremities

- o Lower back
- o Pelvis
- o Hip
- Groin
- Thigh front
- Thigh back
- Knee
- o Tibia
- Calf
- o Achilles tendon
- o Ankle
- Foot
- o Toes

What is the nature of the physical complaint/injury sustained?

- Bruise or bruising
- Muscle or tendon injury; (partial) rupture of a muscle
- o Muscle or tendon injury; strain on muscle or tendon without sudden rupture
- Muscle or tendon injury; don't know what exactly
- \circ $\;$ Sprain, twisting or ligament injury; (partial) rupture of a ligament $\;$
- Sprain, twisting or ligament injury; twisting joint
- o Sprain, twisting or ligament injury, don't know what exactly
- Acute bone fracture (e.g. fracture only due to sprain)
- Bone fracture; bone overload (e.g. fatigue fracture / stress fracture)
- Dislocated joint
- Nerve tightness (e.g. back hernia)
- o Unknown
- Otherwise namely;

Have you been treated for this physical complaint / injury by a (para)medic in the past two weeks? *Multiple answers possible*

Have you been treated for this physical complaint / injury by a (para)medic in the past two weeks?

Multiple answers possible

- **No**
- Yes by general practitioner
- Yes by sports doctor
- Yes by physiotherapist
- o Otherwise, namely:

Closure

Many thanks for your time.

In two weeks you will receive the same questions again.

If you have any questions/comments, please contact (one of) the following researchers from VeiligheidNL:

-Henrike van der Does (h.vanderdoes@veiligheid.nl)

-Ellen Kemler (e.kemler@veiligheid.nl)

Click on the button below to send your answers.

Supplement 4 Additional questions Runfitcheck (T5 & T9)

RFC group (active and inactive approach)

All questions are single response unless otherwise stated in question

[RFCbekeken]

Have you viewed or used the Runfitcheck website (www.runfitcheck2.nl) in the past 4 months?

Yes - on to question 2 No – on to question 5

[RFCWatViews]

What parts of the website have you viewed or used? (multiple answers possible)

Landing page Test for type of runner Warm-up exercises with videos Muscle strengthening exercises Knowledge test(s) Training Schedule Tips Other, namely

[RFCHoevaak]

How many times have you viewed or used the website?

1 time in total 1 time per month 1 time every 2 weeks 1 time per week Several times a week Otherwise....

[RFCDashboard]

Did you create a personal dashboard as a result of the determination test at the beginning?

```
Yes – to end (or monitor where to build in T2)
No – on to question 6
```

[RFCNee]

Why didn't you view/use the Runfitcheck? (multiple answers possible)

I'm using another running app/tool
The website didn't sound interesting
I didn't see the point of the website
The first look at the website did not attract me
No time
Otherwise.....

[RFCDashNo]

Why didn't you create a personal dashboard?

I thought it was too much hassle I didn't see the point of it Otherwise.....

Control group

All questions: single response - unless otherwise stated

[RFC known]

Have you ever heard of the Runfitcheck?

Yes -> on to question 2 No -> on to next part of the question... monitor oid

[RFCknownHow to]

How did you hear about the Runfitcheck?

Google Sociale Media Friends / family / known person Sporting event Otherwise....

[RFCbekeken]

Have you used or viewed the Runfitcheck?

Yes -> on to question 4 No

[RFCWatViews]

Multiple response

What have you viewed or used from the Runfitcheck? (multiple answers possible)

Landing page Test for type of runner Warm-up exercises with videosMuscle strengthening exercises Knowledge test(s) Training ScheduleTips Otherwise...

[RFCHoevaak]

How many times have you viewed or used the website?

1 time in total

- 1 time per month
- 1 time every 2 weeks
- 1 time per week

Several times a week Otherwise....

Supplement 5 Additional analysis Runfitcheck

Data analysis

In sub analysis only the group of runners who reported no injury at baseline was selected. Survival analysis Cox regression was used to assess the differences in time to new RRI between the three groups. Significance and the Wald statistic is reported, when significant the Hazard Ratio will be reported. Generalised estimating equations (GEE) was used to gain insight in the difference in the chance of the occurrence of a new RRI and the development of the severity score between the three groups. Furthermore, GEE was used to see if there were changes over time (the monitor period) in the occurrence of new RRIs and/or the severity score, and whether these differed between groups. Lastly, survival analysis Cox regression and GEE were used to see whether visiting the Runfitcheck had any effect on the chance of the occurrence of new RRI's. In this analysis the six participants from the control group that visited the Runfitcheck, and were excluded from other analysis, were included in the group that visited the Runfitcheck. The GEE accounts for the correlation of repeated outcome measures within subjects over time. All statistical analysis was performed using IBM SPSS (version 25) and significance was accepted at p<0.05.

Results

At the start of the monitor period, 55 percent of participants had no injury (n=405). In a subanalysis, only these participants were included. The number of participants with no injury at the start of the study did not differ between the groups, see table 1 in the main document. The sub analyses showed no difference in the chance of RRI occurrence and severity score between the three groups (Table 1).

Table 1: Effect of Runfitcheck on running-related injuries using generalised estimating	equations;
participants with no injury at T0.	

	RRI	Severity score					
					Wald Chi-		
	Beta	Odds ratio (95% CI)	р	Beta	Square	р	
Group							
Control (n=127)	reference	reference					
RFC-o (n=140)	0.283	1.33 (0.84 - 2.09)	0.221	1.703	2.751	0.097	
RFC-a (n=138)	0.016	1.02 (0.63-1.63)	0.948	0.889	0.700	0.403	

Use of Runfitcheck

Within the four months of monitoring, 15 percent in the RFC-o group and 29 percent in the RFC-a group had visited the online intervention (Table 2). Even in the RFC-a, group only 16 percent had visited the Runfitcheck once in total and even fewer participants had visited the Runfitcheck more often.

	RFC-a (n=122)		RFC-o (n=133)		Control (n=108)		
	Frequency	%	Frequency	%	Frequency	%	
Heard of the RFC **							
Yes					6	6	
No					102	94	
Visited the RFC							
Yes	35	29	20	15	-	-	
No	87	71	113	85	108	100	
Frequency usage							
Not	87	71	113	85	108	100	
One time	19	16	11	8			
Once a month	10	8	6	5			
Once every 2 months	4	3	2	2			
Once a week	1	1	1	1			
Multiple times a week	1	1	-	-			

Table 2: Use of the Runfitcheck

*n is the number of participants that replied to this questionnaire

**This question was only for the control group

Cox Regression showed no difference in time to the first RRI (Wald Chi-Square 1.333, p=0.248) between the group that visited the Runfitcheck and the group that did not visit the Runfitcheck.

The results for the GEE analyses, in which the group that visited the Runfitcheck (n=61) was compared with the group of runners that did not visit the Runfitcheck (n = 322) are shown in Table 3. There was no difference between the two groups in the chance of a new RRI nor in the severity score (Table 3).

Table 3: Effect of visiting the Runfitcheck on running-related injuries using generalised estimating equations

	RRI		Severity score				
	Beta	Odds ratio (95% CI)	р	Beta	Wald Chi-Square	р	
Group							
RFC visited	reference		r	eference			
RFC not visited	-0.195	0.82 (0.55 - 1.24)	0.354	-2.009	1.425	0.233	