

Supplementary table

Supplementary table 1 Clinical characteristics of the patients with chronic hepatitis B using antiviral treatment *vs* untreated

	All patients with CHB	Untreated	Treated with antiviral medication	P- value
Participants, n	98	76	22	
Age, years (range)	44 (25-74)	44 (25-68)	45 (27-74)	0.82
Sex, female, n (%)	50 (51)	43 (57)	7 (32)	0.05
Body anthropometrics				
Body weight, mean (\pm SD), kg	74.5 (\pm 17.7)	75.6 (\pm 18.2)	70.8 (\pm 16.0)	0.26
BMI, mean (\pm SD), kg/m ²	26.3 (\pm 5.2)	26.8 (\pm 5.3)	24.5 (\pm 4.3)	0.07
Waist-to-hip ratio, mean (\pm SD)	0.88 (\pm 0.09)	0.86 (\pm 0.09)	0.91 (\pm 0.06)	< 0.05
Liver parameters				
ALT, median (IQR), U/L	28 (18)	28 (17)	34 (18)	0.26
HBV viral load, median (IQR), IU/mL	33 (2489)	852 (3747)	0 (7.8)	< 0.05*
HBeAg status, n (%)	5 (5)	2 (3)	3 (14)	0.07
Fib-4, median (IQR)	0.89 (0.52)	0.88 (0.50)	0.94 (0.76)	0.09
TE-score, median (IQR), kPa	4.7 (1.5)	4.7 (1.6)	4.9 (1.6)	0.46
CAP, mean (\pm SD), dB/m	247.7 (\pm 64.4)	253 (\pm 64.4)	231 (\pm 62.6)	0.16
Glucose Metabolism				

HbA1c, median (IQR), mmol/L	35.8 (4.5)	36.2 (4.4)	34.6 (4.8)	0.15
Fasting glucose, median (IQR), mmol/L	4.9 (0.6)	4.9 (0.6)	4.8 (0.6)	0.85
2-hour glucose, median (IQR), mmol/L	6.8 (1.8)	6.8 (1.7)	6.9 (2.0)	1.0
Glucose AUC, median (IQR), mmol/L*min	879 (233)	879 (228)	891 (232)	0.83
Insulin AUC, median (IQR), pmol/L	66,311 (54,818)	64,065 (50,694)	67,564 (64,028)	0.63
Cholesterol, mean (\pm SD), mmol/L	4.7 (\pm 1.1)	4.9 (\pm 1.1)	4.3 (\pm 0.8)	< 0.05
Triglycerides, median (IQR), mmol/L	1.0 (0.6)	1.0 (0.7)	1.0 (0.5)	0.77
LDL- cholesterol, median (IQR), mmol/L	2.8 (0.9)	3.0 (1.0)	2.7 (0.9)	0.13
HDL- cholesterol, median (IQR), mmol/L	1.3 (0.5)	1.3 (0.6)	1.2 (0.4)	< 0.05

Physical fitness

VO2max, mean (\pm SD), mL/kg/min	26.9 (\pm 7.5)	26.5 (\pm 7.1)	28.5 (\pm 8.7)	0.27
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According to normality distribution, data is given in mean (\pm SD) or median (IQR). Quantitative outcome variables were compared using the independent t-test and Mann-Whitney U test according to normality distribution. Fisher's exact test was used to analyse categorical data. A P-value of < 0.05 is considered to show a trend, $P < 0.05^*$ indicates statistical significance after Bonferroni correction. Abbreviations: ALT: Alanine aminotransferase, AUC: Area under the curve, BMI: Body mass index, CAP: Controlled

attenuation parameter, FIB-4: Fibrosis index based on four factors, HBeAg: hepatitis B e antigen, HBV: Hepatitis B virus, HDL: High-density lipoprotein, IQR: Interquartile range, LDL: Low-density lipoprotein, SD: Standard deviation, TE: Transient elastography, VO₂max: Maximal oxygen consumption

INTERNATIONALT SPØRGESKEMA VEDRØRENDE FYSISK AKTIVITET (August 2002)

KORT SPØRGESKEMA VEDR. DE SIDSTE 7 DAGE

TIL UNGE OG MIDALDRENDE VOKSNE (mellem 15 og 69 år)

De internationale spørgeskemaer vedrørende fysisk aktivitet (IPAQ - *International Physical Activity Questionnaires*) omfatter et sæt af 4 spørgeskemaer. Der findes lange (5 aktivitetsområder med specifikke spørgsmål) og korte (4 generiske emner) versioner til brug i telefonen eller til at udfylde selv. Spørgeskemaerne har til formål at tjene som almindelige midler, der kan anvendes til at skaffe data om sundhedsrelateret fysisk aktivitet, der kan sammenlignes internationalt.

IPAQ's baggrund

Udviklingen af en international indikator til fysisk aktivitet begyndte i Genève i 1998 og blev fortsat med omfattende pålideligheds- og validitetsprøver i 12 forskellige lande (14 steder) i løbet af året 2000. Slutresultaterne antyder, at disse indikatorer giver acceptable måleegenskaber, der kan anvendes under mange forhold og på forskellige sprog, og at de er velegnede til nationale befolkningsbaserede prævalensundersøgelser af deltagelse i fysisk aktivitet.

Anvendelse af IPAQ

Det anbefales at anvende IPAQ-instrumenterne til monitorerings- og forskningsformål. Det anbefales ikke at ændre rækkefølgen af spørgsmålene eller deres ordlyd, da dette vil påvirke instrumenternes psykometriske egenskaber.

Oversættelse fra engelsk og kulturel tilpasning

Oversættelse fra engelsk tilstræbes for at muliggøre en global anvendelse af IPAQ. Oplysninger om tilgængeligheden af IPAQ på forskellige sprog kan findes på webstedet www.ipaq.ki.se. Hvis der laves en ny oversættelse, anbefaler vi meget at bruge de foreskrevne metoder til at oversætte den oversatte tekst tilbage til det oprindelige sprog, som er beskrevet på IPAQ webstedet.

Overvej venligst at stille oversættelsen af IPAQ til rådighed for andre ved at gøre den tilgængelig på IPAQ webstedet, hvis det er muligt.

Yderligere detaljer vedrørende oversættelse og kulturel tilpasning kan downloades fra webstedet.

Yderligere udviklinger af IPAQ

Det internationale samarbejde hos IPAG fortsættes og en international prævalensundersøgelse af fysisk aktivitet (***International Physical Activity Prevalence Study***) er ved at blive udviklet. Se IPAQ webstedet for nærmere oplysninger.

Yderligere oplysninger

Nærmere oplysninger om IPAQ processen og de forskningsmetoder, der anvendes ved udvikling af IPAQ instrumenter kan findes på webstedet www.ipaq.ki.se og i Booth, M.L. (2000).

Assessment of Physical Activity: An International Perspective. Research Quarterly for Exercise and Sport, 71 (2): p114-20. Andre videnskabelige publikationer og præsentationer om anvendelsen af IPAQ er sammenfattet på webstedet.

INTERNATIONALT SPØRGESKEMA VEDRØRENDE FYSISK AKTIVITET

Vi ønsker at undersøge de forskellige former for fysisk aktivitet, mennesker udfører i dagligdagen. Spørgsmålene vedrører den tid, du i løbet af de **sidste 7 dage** har tilbragt med fysisk aktivitet. Du bedes besvare hvert spørgsmål, selvom du selv ikke synes, at du er en aktiv person. Angiv venligst aktiviteter på dit arbejde, aktiviteter som udgør en del af arbejdet hjemme eller i haven, aktiviteter for at komme fra et sted til et andet, og i fritiden aktiviteter i forbindelse med afslapning, motion eller idræt.

Angiv alle **meget anstrengende** aktiviteter, som du udførte de **sidste 7 dage**. Ved **meget anstrengende** fysisk aktivitet forstås aktiviteter, der kræver hård fysisk anstrengelse, som får dig til at trække vejret meget mere end normalt. Angiv *kun* fysiske aktiviteter, som du har udført i mindst 10 minutter ad gangen.

1. Hvor mange dage har du **de sidste 7 dage** udført **meget anstrengende** fysiske aktiviteter som løftet tunge ting, gravet, aerobics eller cyklet hurtigt?

_____ Dage pr. uge

Ingen meget anstrengende aktiviteter ➔

Gå til spørgsmål 3

2. Hvor meget tid tilbringer du som regel med **meget anstrengende** fysiske aktiviteter på en af disse dage?

_____ Timer pr. dag

_____ Minutter pr. dag

Ved ikke/ikke sikker

Angiv alle **moderate** aktiviteter, som du udførte de **sidste 7 dage**. Ved **moderat** fysisk aktivitet forstås aktiviteter, der kræver moderat fysisk anstrengelse, som får dig til at trække vejret noget mere end normalt. Angiv *kun* fysiske aktiviteter, som du har udført i mindst 10 minutter ad gangen.

3. Hvor mange dage har du **de sidste 7 dage** udført **moderate** fysiske aktiviteter som båret lette genstande, cyklet i regelmæssigt tempo eller spillet tennisdouble? Medregn ikke gåture.

_____ Dage pr. uge

Ingen moderate aktiviteter

Gå til spørgsmål 5

4. Hvor meget tid tilbringer du som regel med **moderate** fysiske aktiviteter på en af disse dage?

_____ **Timer pr. dag**

_____ **Minutter pr. dag**

Ved ikke/ikke sikker

Angiv den tid **de sidste 7 dage**, du tilbragte med **gåture**. Dette er inklusive gåture på arbejdet eller hjemme, gåture i forbindelse med rejser fra et sted til et andet, og alle andre gåture kun i forbindelse med afslapning, idræt, motion eller fritid.

5. Hvor mange dage har du **de sidste 7 dage** gået mindst 10 minutter ad gangen?

_____ **Dage pr. uge**

Ingen gåture → **Gå til spørgsmål 7**

6. Hvor meget tid tilbringer du som regel med **gåture** på en af disse dage?

_____ **Timer pr. dag**

_____ **Minutter pr. dag**

Ved ikke/ikke sikker

Det sidste spørgsmål vedrører den tid, du har brugt på at **sidde ned** på ugedage de **sidste 7 dage**. Medregn tid tilbragt på arbejdet, hjemme, mens du laver kursusarbejde og i fritiden. Dette kan være inklusive den tid, du har tilbragt ved et skrivebord, med venner, når du har læst eller har siddet eller lagt dig for at se TV.

7. Hvor meget tid de **sidste 7 dage** har du brugt på at **sidde ned** på en **ugedag**?

_____ **Timer pr. dag**

_____ **Minutter pr. dag**

Ved ikke/ikke sikker

Du er nu færdig med at besvare spørgeskemaet. Tak for din deltagelse.

Evaluation Measures

International Physical Activity Questionnaire - Short Form

OVERVIEW

- This measure assesses the types of intensity of physical activity and sitting time that people do as part of their daily lives are considered to estimate total physical activity in MET-min/week and time spent sitting.

SUBSCALES

- None
- Sample items from the scale:
 - » During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, digging, aerobics, or fast bicycling?

STEPPING UP THEME(S) & OUTCOME(S)

- Health & Wellness
 - » Youth are physically healthy

GOOD TO KNOW

- Used by the Ontario Trillium Foundation
- [Click here for Guidelines for Data Processing and Analysis of the International Physical Activity Questionnaire \(IPAQ\) - Short Form](#)

PSYCHOMETRICS

- Reliability**
Test-retest reliability indicated good stability
High reliability ($\alpha < .80$)
- Validity**
Predictive validity
Concurrent validity
Convergent validity
Criterion validity
Discriminant validity

TARGET POPULATION

- Youth 15 years of age and older

LENGTH & HOW IT IS MEASURED

- 7 items
- Open-ended questions surrounding individuals' last 7-day recall of physical activity
- Self-report, paper-pencil version or orally
- Available in: English and many other languages

DEVELOPER

- International Physical Activity Questionnaire, 1998

LEARN MORE

- International Physical Activity Questionnaire. (2016). Home. Retrieved from <https://sites.google.com/site/theipaq/>
- C.L. Craig, A. Marshall, M. Sjostrom, A. Bauman, M. Booth, B. Ainsworth, et al. International Physical Activity Questionnaire: 12-country reliability and validity. *Med Sci Sports Exerc*, 35 (2003), pp. 1381–1395
- Lee, P.H., Macfarlane, D.J., Lam, T.H., Stewart, S.M. (2011). *Validity of the international physical activity questionnaire short form (IPAQ-SF): A systematic review*. International Journal of Behavioral Nutrition and Physical Activity. 8:115.
- van Poppel MNM, Chinapaw MJM, Mokkink LB, van Mechelen W, Terwee CB: Physical activity questionnaires for adults: A systematic review of measurement properties. *Sports Medicine*. 2010, 40: 565-600. 10.2165/11531930-000000000-00000.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

(August 2002)

SHORT LAST 7 DAYS SELF-ADMINISTERED FORMAT

FOR USE WITH YOUNG AND MIDDLE-AGED ADULTS (15-69 years)

The International Physical Activity Questionnaires (IPAQ) comprises a set of 4 questionnaires. Long (5 activity domains asked independently) and short (4 generic items) versions for use by either telephone or self-administered methods are available. The purpose of the questionnaires is to provide common instruments that can be used to obtain internationally comparable data on health-related physical activity.

Background on IPAQ

The development of an international measure for physical activity commenced in Geneva in 1998 and was followed by extensive reliability and validity testing undertaken across 12 countries (14 sites) during 2000. The final results suggest that these measures have acceptable measurement properties for use in many settings and in different languages, and are suitable for national population-based prevalence studies of participation in physical activity.

Using IPAQ

Use of the IPAQ instruments for monitoring and research purposes is encouraged. It is recommended that no changes be made to the order or wording of the questions as this will affect the psychometric properties of the instruments.

Translation from English and Cultural Adaptation

Translation from English is supported to facilitate worldwide use of IPAQ. Information on the availability of IPAQ in different languages can be obtained at www.ipaq.ki.se. If a new translation is undertaken we highly recommend using the prescribed back translation methods available on the IPAQ website. If possible please consider making your translated version of IPAQ available to others by contributing it to the IPAQ website. Further details on translation and cultural adaptation can be downloaded from the website.

Further Developments of IPAQ

International collaboration on IPAQ is on-going and an ***International Physical Activity Prevalence Study*** is in progress. For further information see the IPAQ website.

More Information

More detailed information on the IPAQ process and the research methods used in the development of IPAQ instruments is available at www.ipaq.ki.se and Booth, M.L. (2000). *Assessment of Physical Activity: An International Perspective*. Research Quarterly for Exercise and Sport, 71 (2): s114-20. Other scientific publications and presentations on the use of IPAQ are summarized on the website.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

_____ days per week

No vigorous physical activities → **Skip to question 3**

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

_____ hours per day

_____ minutes per day

Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

_____ days per week

No moderate physical activities → **Skip to question 5**

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ hours per day

_____ minutes per day

Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

_____ days per week

No walking → **Skip to question 7**

6. How much time did you usually spend **walking** on one of those days?

_____ hours per day

_____ minutes per day

Don't know/Not sure

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ hours per day

_____ minutes per day

Don't know/Not sure

This is the end of the questionnaire, thank you for participating.