





# Workshop: Is TV really a devil?

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# Agenda

- Who are we?
- Context
- Data on dietary patterns, lifestyle and exercise of Portuguese elders comparison with Norwegian
- Smart TV as a vehicle for education and motivation and therefore intervention
- Senior Saúde.Come TV app
- Time for debate
- Systematization of findings





1,2,3

Please choose 1, 2 or 3, and write it down in one paper













# Main goal

 To promote and develop epidemiological and clinical research

# **Areas of Action**



- Non-communicable chronic diseases
- Healthy and active ageing
- Vulnerable populations and inequities
- Patient-centered medicine
- Information and communication technologies

- Clinical research / Public health
- Subject Society
- Close up Health/ Social





# Services & Activities

- Epidemiological studies and research projects' design and development
- Ongoing population-based Cohorts and data availability
- Biological samples & Imaging data
- Innovative tools for metrics development
- Training and educational activities
- Public Health promotion
- Networking







Helena Canhão, MD, PhD **Principal Investigator** 



Jaime Branco MD, PhD Co-PI



Ana Rodrigues MD Scientific Head



Rute de Sousa BSc Psychologist Unit Manager



Mª João Gregório PhD Nutritionist Reseacrher





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#### Context



Data on dietary patterns, lifestyle and exercise of Portuguese and Norwegian elders



Smart TV as a vehicle for education and motivation and therefore intervention/ Senior Saúde.Come TV app





### Context

Elderly live longer life

but...



have higher disability and poor quality of life due to chronic diseases





#### Context

Chronic conditions are responsible for 70 % of all deaths



and....

Just four health behaviors account for the most risk for preventable chronic conditions poor diet, physical inactivity, smoking, and alcohol misuse





What is food insecurity and why is it so important to know about?

Data on dietary patterns, lifestyle and exercise of Portuguese and Norwegian elders

Smart TV as a vehicle for education and motivation and therefore intervention/ Senior Saúde.Come TV app



# **Europe: North and South**

Dietary patterns

Physical exercise

Life habits





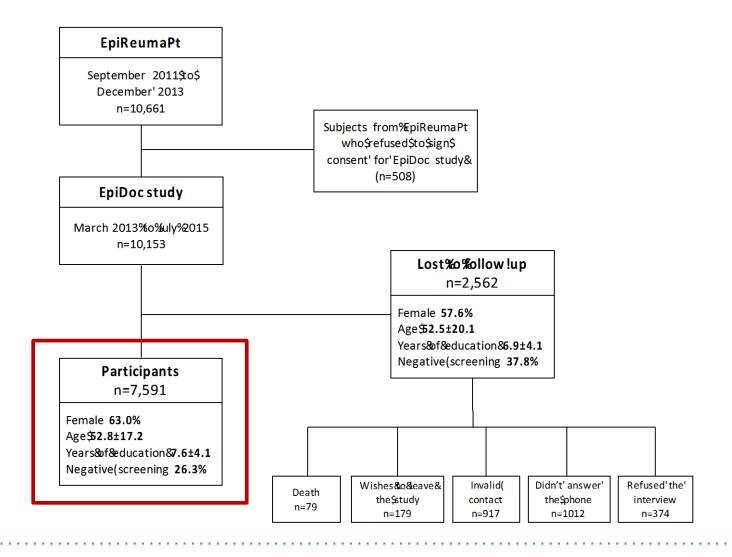
### Food patterns and its determinants

- EpiReumaPt/CoReumaPt: Portuguese cohort with 10.661 a representative sample of the Portuguese population, followed since 2011;
- Estudo HUNT Norwegian cohort with 126.000 participants.





### Study Design and participants (CoReumaPt)







### **Data collection (CoReumaPt)**

Socioeconomic and demographic data	Food consumption data	Physical activity and other lifestyle data	Clinical data	Chronic diseases
Sociodemographic Age / Date of birth Gender Ethnicity Nationality Marital status  Socioeconomic Home care Medical Assistance Household income Yield own Education level Current professional status Presenteeism Absenteeism Early retirement Unemployment disability	Dietary behaviors  (number of meals per day, per week frequency of vegetables soup consumption, per week frequency of vegetables, fruit and diary products (milk, yogurts and cheese) consumption, number of meat meals per week, number of fish meals per week, daily frequency of water or tea intake)	Physical exercise  questions regarding physical exercise frequency (Regular physical exercise -Yes/No; Frequency per week; Which kind of physical exercise?)  Alcohol and coffee consumption  Smoking (present and past)  Sleeping hours per day	. Blood Pressure . Questionnaires of function/disease activity according to disease . Pain assessment . FRAX . HAQ . Fractures  Anthropometric Data Weight BMI Height . Pharmacological Therapies . Non-pharmacological . Surgery	High blood pressure Diabetes High cholesterol level Pulmonary disease Cardiac Disease Gastrointestinal disease Neurologic disease Allergy Mental disease Neoplastic disease Thyroid and parathyroid disease Hipogonadism Hyperuricemica Renal colic Rheumatic diseases





I	CoReumaPt! n=7,591!	≥!65!years! n=2,393!
Years&f&ducation! (mean!±!sd)&	8.66!(3.90)!	4.75!(3.99)!
Education&evel! >!12!years!	1,336!(22.2%)!	143!(6.5%)!
10N 2!years!	1,391!(24.8%)!	125!(5.1%)!
5M9!years!	1,547!(21.3%)!	263!(11.1%)!
0Nt!years!	3,272!(31.7%)!	1,831!(77.3%)!
Marital&tatus!	4 2051/20 48/31	4001/2 40/ )
Single! Married!	1,285!(28.4%)!	100!(3.1%)!
	4,591!(53.2%)!	1,480!(65.8%)!
Divorced!	556!(6.8%)!	100!(4.9%)!
Widow(er)!	910!(7.3%)!	705!(25.9%)!
Consensual!union!	244!(4.2%)!	6!(0.2%)!
Household&		
<500€!	1,331!(18.0%)!	663!(32.1%)!
	1,331!(18.0%)! 1,257!(20.8%)!	663!(32.1%)! 491!(26.5%)!
<500€!		
<500€! 501€!to!750€!	1,257!(20.8%)!	491!(26.5%)!
<500€! 501€!to!750€! 751€!to!1000€!	1,257!(20.8%)! 943!(19.0%)!	491!(26.5%)! 235!(19.3%)!
<500€! 501€!to!750€! 751€!to!1000€! 1001€!to!1500€!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)!
<500€! 501€!to!750€! 751€!to!1000€! 1001€!to!1500€! 1501€!to!2000€!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)!
<500€! 501€!to!750€! 751€!to!1000€! 1001€!to!1500€! 1501€!to!2000€!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)!
<500€! 501€!to!750€! 751€!to!1000€! 1001€!to!1500€! 1501€!to!2000€! 2001€!to!2500€!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)! 188!(3.8%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)! 34!(2.5%)!
<500€!  501€!to!750€!  751€!to!1000€!  1001€!to!1500€!  1501€!to!2000€!  2001€!to!2500€!  2501€!to!3000€!  3001€!to!4000€!  >4000€!  Household&	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)! 188!(3.8%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)! 34!(2.5%)! 19!(1.0%)!
<500€!  501€!to!750€!  751€!to!1000€!  1001€!to!1500€!  1501€!to!2000€!  2001€!to!2500€!  2501€!to!3000€!  3001€!to!4000€! >4000€!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)! 188!(3.8%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)! 34!(2.5%)! 19!(1.0%)!
<500€!  501€!to!750€!  751€!to!1000€!  1001€!to!1500€!  1501€!to!2000€!  2001€!to!2500€!  2501€!to!3000€!  3001€!to!4000€!  >4000€!  Household& composition	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)! 188!(3.8%)! 108!(2.1%)! 73!(2.2%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)! 34!(2.5%)! 19!(1.0%)!
<500€!  501€!to!750€!  751€!to!1000€!  1001€!to!1500€!  1501€!to!2000€!  2001€!to!2500€!  2501€!to!3000€!  3001€!to!4000€!  >4000€!  Household& composition!  1!person!	1,257!(20.8%)! 943!(19.0%)! 852!(17.5%)! 511!(10.9%)! 295!(5.7%)! 188!(3.8%)! 108!(2.1%)! 73!(2.2%)!	491!(26.5%)! 235!(19.3%)! 184!(10.4%)! 91!(4.6%)! 49!(2.9%)! 34!(2.5%)! 19!(1.0%)! 13!(0.8%)!

Higher proportion of Portuguese Elderly are poor, have low literacy and live alone

# **Elderly Health characteristics**

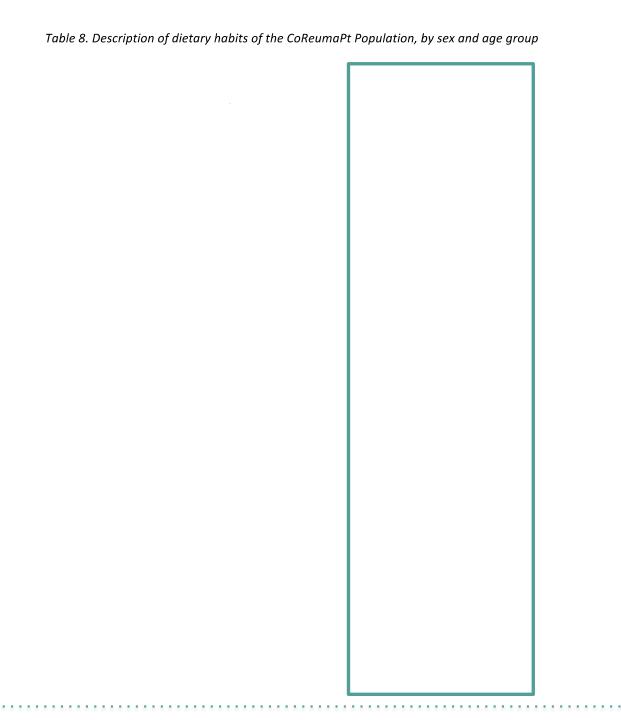


Higher proportion of Portuguese elderly have depression and other chronic diseases

### Anthropometric&lata&	!	CoReumaPt!total& n=7,591!	≥!65!years! n=2,393!
(meanistsd)& 25.84(4.49)! 27.31(9.21)!  Body&lassSandex&kg/m*)!  Underweight& 2,670(45.5%)! 606(30.4%)!  Overweight& 2,788(37.1%)! 943(46.5%)!  Obesity& 1,353(15.4%)! 509(22.3%)!  Alconotantaee.  Alcohol&ntake! Daily! 1,693(23.2%)! 689(33.8%)!  Occasionally! 2,4371(39.6%)! 429(19.3%)!  Never! 3,1501(37.2%)! 1,209(46.9%)!  Alcohol&ntake&rofile!! Morethan 13talcoholhunits! vsbess! 258(4.0%)! 701(4.6%)!  Smoking&labits&  Smoking&labits*  CurrentIsmoker! 1,289(24.5%)! 1011(5.2%)!  PastIsmoker! 1,522(21.1%)! 538(25.6%)!  Never! 4,4771(54.4%)! 1,6911(69.2%)!  Physical&ctivity&  Physical&ctivity&  Physical&ctivity   1,8071(29.4%)! 4521(25.5%)!  Active! 4,4201(58.7%)! 1,5291(66.6%)!  Moderate! 7381(12.0%)! 1551(7.9%)!  Active! 1,8071(29.4%)! 4521(25.5%)!  Sleep&labits&  Sleep&labits&  Sleep&labits&  Sleep&labits   6891(15.2%)! 3181(29.6%)!  ≥/5/hours/day! 2,9441(84.8%)! 6451(70.4%)!  Screen&ime&er&lay&  Frequency&f&vatching&  TVI  Doesn'thwatch! 1841(4.1%)! 341(1.9%)!  ≤/5/hours/day! 1,3271(20.2%)! 5711(3.4.6%)!  ≥/5/hours/day! 1,3271(20.2%)! 5711(3.4.6%)!  ≥/5/hours/day! 1,3271(20.2%)! 5711(3.6.%)!  Frequency&f&sing&  computer/videogames/fabitets!  Doesn'thwele! 2,7091(33.7%)! 1,4801(84.5%)!  ≤/5/hours/day! 1,9661(37.4%)! 2311(12.6%)!  348/hours/day! 1,9661(37.4%)! 2311(12.6%)!  391/hours/day! 1,9661(37.4%)! 2311(12.6%)!  391/hours/day! 1,9661(37.4%)! 2311(12.6%)!  391/hours/day! 1,9661(37.4%)! 2311(12.6%)!  5/5/hours/day! 1,9661(37.6%)! 1,2941(83.6%)!	Anthropometric&data&	!	1
Underweight& 111½(2.0%)! 16⅓(0.8%)! Normal/weight& 2,670(45.5%)! 606⅓(30.4%)!  Overweight& 2,788⅓(37.1%)! 943⅓(46.5%)! Obesity& 1,353⅓(15.4%)! 509⅓(22.3%)!  Alconoranaee.  Alcohol&ntake! Daily! 1,693⅓(23.2%)! 689⅓(33.8%)! Occasionally! 2,437⅓(39.6%)! 429⅓(19.3%)! Never! 3,150⅓(37.2%)! 1,209⅓(46.9%)!  Alcohol&ntake\$rofile!! Morethan 13⅓(choldunits! vsiless! 258⅓(4.0%)! 70⅓(46.9%)!  Smoking&abits& Smoking&abits& Smoking&abits! Currentsmoker! 1,289⅓(24.5%)! 101⅓(5.2%)! Past!smoker! 1,522⅓(21.1%)! 538⅓(25.6%)! Never! 4,477⅓(54.4%)! 1,691⅙(69.2%)!  Physical&ctivity& Physical&ctivity* P	(mean±!sd)&	25.84!(4.49)!	27.31!(5.21)!
Overweight& 2,788(37.1%)! 943(46.5%)! Obesity& 1,353(15.4%)! 5091(22.3%)!  Alconolantakes Alcoholantake! Daily! 1,6931(23.2%)! 6891(33.8%)! Occasionally! 2,4371(39.6%)! 4291(19.3%)! Never! 3,1501(37.2%)! 1,2091(46.9%)! Alcoholantake&profile!! More!than!3!alcohol/units! vsbess! 2581(4.0%)! 701(4.6%)! Smoking&abits& Smoking&abits& Smoking&abits! Current!smoker! 1,2891(24.5%)! 1011(5.2%)! Past!smoker! 1,522!(21.1%)! 5381(25.6%)! Never! 4,477!(54.4%)! 1,6911(69.2%)! Physical&ctivity& Physical&ctivity& Physical&ctivity& Physical&ctivity* Inactive! 4,420!(58.7%)! 1,529!(66.6%)! Active! 1,807!(29.4%)! 452!(25.5%)! Sleep&abits& Sleep&abits& Sleep&abits! <\Sinours/day! 4,062!(68.5%)! 3181(29.6%)! ≥\Sifhours/day! 4,062!(68.5%)! 8591(47.2%)!  2516hours/day! 512!(7.2%)! 5711(34.6%)! ≥\Sifhours/day! 512!(7.2%)! 2971(16.3%)! Frequency&f&sing&computer/videogames/tablets! Doesn'thuse! 2,709!(33.7%)! 1,480!(84.5%)! ≤\Sifhours/day! 1,966!(37.4%)! 2311(12.6%)! 314\nours/day! 3931(8.1%)! 301(1.5%)! ≥\Sifhours/day! 1,0181(20.9%)! 201(1.4%)! Search∨&ealth&nformation& Se		111!(2.0%)!	16!(0.8%)!
Alconolantakea	Normal!weight&	2,670!(45.5%)!	606!(30.4%)!
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Alcoholântake!   Daily!   1,693!(23.2%)!   689!(33.8%)!	Obesity&	1,353!(15.4%)!	509!(22.3%)!
Daily! 1,693!(23.2%)! 689!(33.8%)!  Occasionaliy! 2,437!(39.6%)! 429!(19.3%)!  Never! 3,150!(37.2%)! 1,209!(46.9%)!  Alcoholântakeֆrofile!! Morethant3lalcoholtunits! vsiless! 258!(4.0%)! 70!(4.6%)!  Smoking&abits&  Smoking&abits! Current!smoker! 1,289!(24.5%)! 101!(5.2%)!  Past!smoker! 1,522!(21.1%)! 538!(25.6%)!  Never! 4,477!(54.4%)! 1,691!(69.2%)!  Physical&ctivity& Physical&ctivity& Physical&ctivity! Inactive! 4,420!(58.7%)! 1,529!(66.6%)!  Moderate! 738!(12.0%)! 155!(7.9%)!  Active! 1,807!(29.4%)! 452!(25.5%)!  Sleep&abits &  Sleep&abits &  Sleep&abits! <689!(15.2%)! 318!(29.6%)! ≥68hours/day! 689!(15.2%)! 318!(29.6%)! ≥69thours/day! 2,944!(84.8%)! 645!(70.4%)!  Screen&ime&per&ay& Frequency&f&vatching& TV!  Doesn'thwatch! 184!(4.1%)! 34!(1.9%)! ≤12thours/day! 4,062!(68.5%)! 859!(47.2%)! 314fhours/day! 1,327!(20.2%)! 571!(34.6%)! ≥15thours/day! 512!(7.2%)! 297!(16.3%)!  Frequency&f&asing& computer/videogames/tablets! Doesn'thuse! 2,709!(33.7%)! 1,480!(84.5%)! ≤12thours/day! 1,966!(37.4%)! 231!(12.6%)! 314fhours/day! 393!(8.1%)! 30!(1.5%)! ≥15thours/day! 1,018!(20.9%)! 20!(1.4%)! Search∨&ealth&nformation& Search∨&ealth&nform	Alconolantakea		
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Smoking&abits&           Smoking&abits!         1,289!(24.5%)!         101!(5.2%)!           Current!smoker!         1,522!(21.1%)!         538!(25.6%)!           Never!         4,477!(54.4%)!         1,691!(69.2%)!           Physical&ctivity&         Physical&ctivity!         1,691!(69.2%)!           Physical&ctivity!         1,691!(69.2%)!         1,691!(69.2%)!           Physical&ctivity&         1,691!(69.2%)!         1,529!(66.6%)!           Physical&ctivity!         1,807!(29.4%)!         1,529!(66.6%)!           Moderate!         738!(12.0%)!         155!(7.9%)!           Active!         1,807!(29.4%)!         452!(25.5%)!           Sleep&abits&         318!(29.6%)!         318!(29.6%)!           Sleep&abits!         689!(15.2%)!         318!(29.6%)!           Sceren&ime&er&lay&         689!(15.2%)!         318!(29.6%)!           Sceren&ime&er&lay&         7.94!(84.8%)!         645!(70.4%)!           Sceren&ime&er&lay&         184!(4.1%)!         34!(1.9%)!           Sceren&ime&er&lay&         1,327!(20.2%)!         571!(34.6%)!           Sceren&ime&er&lay         1,327!(20.2%)!         571!(34.6%)!           Sceren&ime&er&lay         1,327!(20.2%)!         571!(36.3%)!           Frequency&if&xsing&         2,709	Alcoholāntake <b>p</b> rofile!! More!than!3!alcohol!units!		
Smoking&abits!   1,289!(24.5%)!   101!(5.2%)!   PastIsmoker!   1,522!(21.1%)!   538!(25.6%)!   Never!   4,477!(54.4%)!   1,691!(69.2%)!   Physical&ctivity&   Physical&ctivity!   1,529!(66.6%)!   Nederate!   4,420!(58.7%)!   1,529!(66.6%)!   Noderate!   738!(12.0%)!   155!(7.9%)!   Active!   1,807!(29.4%)!   452!(25.5%)!   Sleep&abits&   Sleep&abits&   Sleep&abits!   (50hours/day!   689!(15.2%)!   318!(29.6%)!   ≥16!hours/day!   2,944!(84.8%)!   645!(70.4%)!   Screen&ime&er&lay&   Frequency&f&vatching&   TV!   Doesn'thwatch!   184!(4.1%)!   34!(1.9%)!   ≤12!hours/day!   4,062!(68.5%)!   859!(47.2%)!   374!hours/day!   1,327!(20.2%)!   571!(34.6%)!   ≥15!hours/day!   512!(7.2%)!   297!(16.3%)!   Frequency&f&rsing&   computer/videogames/tablets!   Doesn'thuse!   2,709!(33.7%)!   1,480!(84.5%)!   ≤12!hours/day!   1,966!(37.4%)!   231!(12.6%)!   348hours/day!   1,966!(37.4%)!   231!(12.6%)!   ≥15!hours/day!   393!(8.1%)!   30!(1.5%)!   ≥15!hours/day!   1,018!(20.9%)!   20!(1.4%)!   Search∨&ealth&nformation&   Search∨&ealth&nformation&   Search∨&ealth&nformation&   Search∨&ealth&nformation&   Search∨&ealth&nformation&   Search∨&ealth&nformation&   3,763!(73.6%)!   1,294!(83.6%)!   Non\searcheroxealth&nformation&   3,763!(73.6%)!   1,294!(83.6%)!		200:(4.070):	7.0:(4.070):
Physical&ctivity&	Smoking&habits!	1,289!(24.5%)!	101!(5.2%)!
Physical&ctivity& Physical&ctivityI Inactive!	Past!smoker!	1,522!(21.1%)!	538!(25.6%)!
Physical&ctivity! Inactive! 4,420!(58.7%)! 1,529!(66.6%)!  Moderate! 738!(12.0%)! 155!(7.9%)!  Active! 1,807!(29.4%)! 452!(25.5%)!  Sleep&abits&  Sleep&abits! -(56hours/day! 689!(15.2%)! 318!(29.6%)! ≥!6!hours/day! 2,944!(84.8%)! 645!(70.4%)!  Screen&ime&er&lay&  Frequency&f&ratching& TV!  Doesn'thwatch! 184!(4.1%)! 34!(1.9%)! ≤!2!hours/day! 4,062!(68.5%)! 859!(47.2%)!  3'4!hours/day! 1,327!(20.2%)! 571!(34.6%)! ≥!5!hours/day! 512!(7.2%)! 297!(16.3%)! Frequency&f&rsing& computer/videogames/tablets!  Doesn'thuse! 2,709!(33.7%)! 1,480!(84.5%)! ≤!2!hours/day! 1,966!(37.4%)! 231!(12.6%)! 3'4!hours/day! 393!(8.1%)! 30!(1.5%)! ≥!5!hours/day! 1,018!(20.9%)! 20!(1.4%)! Search∨&ealth&nformation& Sea	Never!	4,477!(54.4%)!	1,691!(69.2%)!
Inactive!	Physical&ctivity&		
Moderate! 738!(12.0%)! 155!(7.9%)!  Active! 1,807!(29.4%)! 452!(25.5%)!  Sleep&abits &  Sleep&abits! <\689!(15.2%)! 318!(29.6%)! ≥\681\tours\day! 689!(15.2%)! 318!(29.6%)! ≥\681\tours\day! 2,944!(84.8%)! 645!(70.4%)!  Screen&ime&per&lay&  Frequency&f&vatching& TV!  Doesn'thwatch! 184!(4.1%)! 34!(1.9%)! ≤\12!\nours\day! 4,062!(68.5%)! 859!(47.2%)!  3\4\text{hours\day!} 1,327!(20.2%)! 571!(34.6%)! ≥\15!\nours\day! 512!(7.2%)! 297!(16.3%)!  Frequency&f&sing& computer/videogames/tablets!  Doesn'thuse! 2,709!(33.7%)! 1,480!(84.5%)! ≤\12!\nours\day! 1,966!(37.4%)! 231!(12.6%)! 3\4\text{hours\day!} 393!(8.1%)! 30!(1.5%)! ≥\15!\nours\day! 1,018!(20.9%)! 20!(1.4%)!  Search∨&ealth&nformation& Search∨&ealth&nformation& Search∨&ealth&information& Search∨&ealth∈	Physical&ctivity!		
Active! 1,807!(29.4%)! 452!(25.5%)!  Sleep&abits & Sleep&abits! <\689!(15.2%)! 318!(29.6%)! ≥\68\text{lours/day!} 689!(15.2%)! 318!(29.6%)! ≥\68\text{lours/day!} 645!(70.4%)!  Screen&ime&er&lay& Frequency&f&vatching& TV! Doesn'thwatch! 184!(4.1%)! 34!(1.9%)! ≤\12\text{lours/day!} 4,062!(68.5%)! 859!(47.2%)!  3\4\text{lours/day!} 1,327!(20.2%)! 571!(34.6%)! ≥\15\text{lours/day!} 512!(7.2%)! 297!(16.3%)!  Frequency&f&sing& computer/videogames/tablets! Doesn'thuse! 2,709!(33.7%)! 1,480!(84.5%)! ≤\12\text{lours/day!} 1,966!(37.4%)! 231!(12.6%)! 3\4\text{lours/day!} 393!(8.1%)! 30!(1.5%)! ≥\15\text{lours/day!} 1,018!(20.9%)! 20!(1.4%)!  Search∨&ealth&nformation& Search∨&ealth& intervalse*		` ,	
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Sleep&abits!   689!(15.2%)!   318!(29.6%)!     ≥!6!hours/day!   2,944!(84.8%)!   645!(70.4%)!     Screen&ime&per&lay&	Active!	1,807!(29.4%)!	452!(25.5%)!
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≥!6!hours/day! 2,944!(84.8%)! 645!(70.4%)!  Screen&ime&per&lay&  Frequency&f&vatching& TV!  Doesn't!watch! 184!(4.1%)! 34!(1.9%)! ≤!2!hours/day! 4,062!(68.5%)! 859!(47.2%)!  3'4!hours/day! 1,327!(20.2%)! 571!(34.6%)! ≥!5!hours/day! 512!(7.2%)! 297!(16.3%)!  Frequency&f&sing& computer/videogames/tablets!  Doesn't!use! 2,709!(33.7%)! 1,480!(84.5%)! ≤!2!hours/day! 1,966!(37.4%)! 231!(12.6%)! 3'4!hours/day! 393!(8.1%)! 30!(1.5%)! ≥!5!hours/day! 1,018!(20.9%)! 20!(1.4%)!  Search∨&ealth&nformation& Search∨&ealth&information& Search∨&ealth&information& Search∨&ealth&information&  Search∨&ealth&i		6891(15.2%)!	3181(29.6%)!
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Search∨&ealth&           information!           Non'searchers&         3,763!(73.6%)!         1,294!(83.6%)!	≥!5!hours/day!	1,018!(20.9%)!	20!(1.4%)!
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Non'searchers& 3,763!(73.6%)! 1,294!(83.6%)!			
Searchers <b>3</b> 1,269!(26.4%)! 246!(16.4%)!		3,763!(73.6%)!	1,294!(83.6%)!
	Searchers&	1,269!(26.4%)!	246!(16.4%)!



The majority of Portuguese elderly watch at least 3h/day and do not use computer





#### Men tend to:

- Do less meals per day
- Have a lower frequency of soup, vegetables fresh fruit consumption
- Have a higher frequency of meat consumption

#### Elderly tend to:

 Eat more frequently soup, vegetables and fresh fruit

Table 8. Description of dietary habits of the CoReumaPa	t Population, by sex and age gro	oup	SAÚDE.COM
			FOOD SECURI
			Men tend to: - Have a higher frequency of meat consumption
			Elderly tend to: - Eat more frequently fish - Eat less frequently meat - Drink less water
	%) 72 (2.5%)		



#### **Dietary patterns**

Cluster analysis was performed to identify dietary patterns.

#### Cluster 1

"low fruit and vegetables intake and higher meat intake"

1,312 individuals

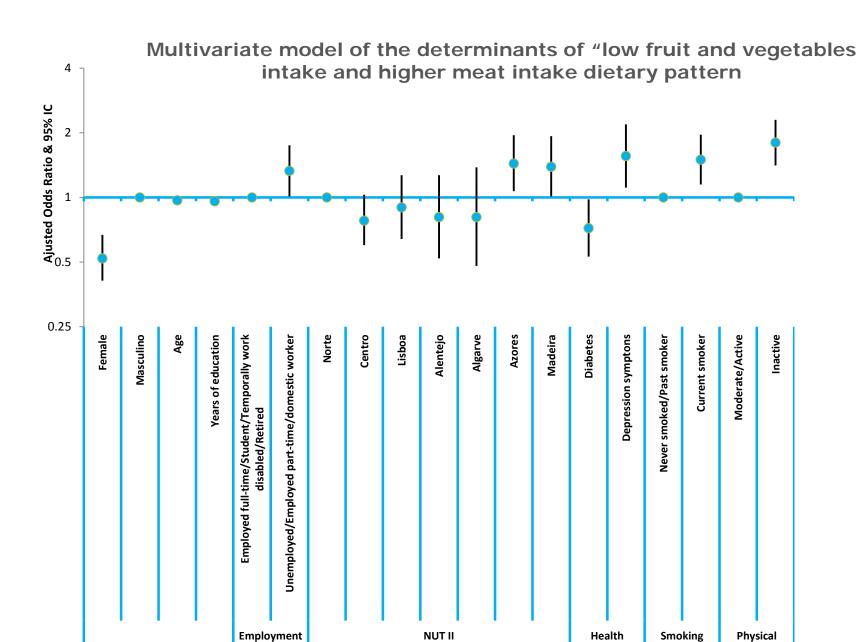
#### Cluster 2

"higher fruit, vegetables and fish intake"

4,642 individuals

- Reduced number of meals per week
- Less frequency of consumption of soup, vegetables, fresh fruit, milk/diary products
- Less water intake
- Higher frequency of consumption of meat

- Higher number of meals per week
- High frequency of consumption of soup, vegetables, fresh fruit, fish, milk/diary products
- High water intake



status

habits

activity

characteristics



Favour "Lower fruit and vegetables intake and higher meat intake" dietary pattern





#### Comparison of CoReumaPt vs Hunt study



**HUNT Research Centre** 

Hunt study – is one of the largest health study with information of 120000 participants. Data collection ended on 2008 (50922 individuals and among those 11624 were 65 years old or older).

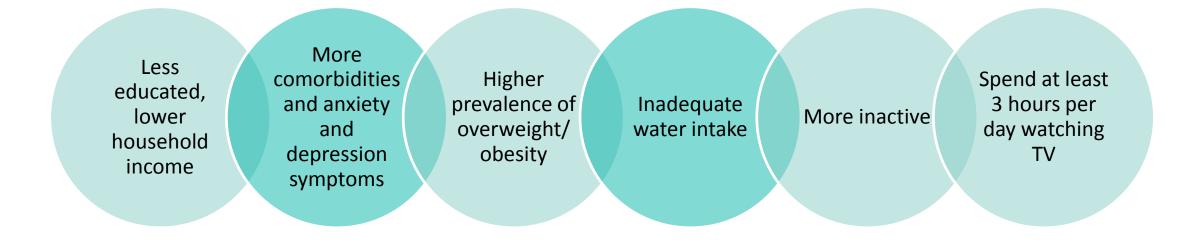
Elderly in Norway are more physical active than elderly from Portugal.

The consumption of vegetables are similar in Portugal and Norway, however fruit consumption were higher among the Portuguese. The majority of elderly from Norway also have inadequate intake of water.

Elderly from Norway that are less educated, smokers and less physical activity presented more frequently inadequate fruit and vegetables consumption.



### Portuguese elderly characteristics







What is food insecurity and why is it so important to know about?

Data on dietary patterns, lifestyle and exercise of Portuguese and Norwegian

Smart TV as a vehicle for education and motivation and therefore intervention/ Senior Saúde.Come TV app



# Is TV really a devil?

Write down your thoughts about it...

... and share with us!

Channels

**Programs** 

Impact on life

...





# Health risks of watching TV

Sedentary behaviour and a risk factor for several diseases?

Exposure to food advertising on TV?





# TV watching

On average, **40% of daily free time** is occupied by **TV viewing** within several European countries and this corresponds to a daily TV viewing time of about **3.5 to 4.0 hours**.

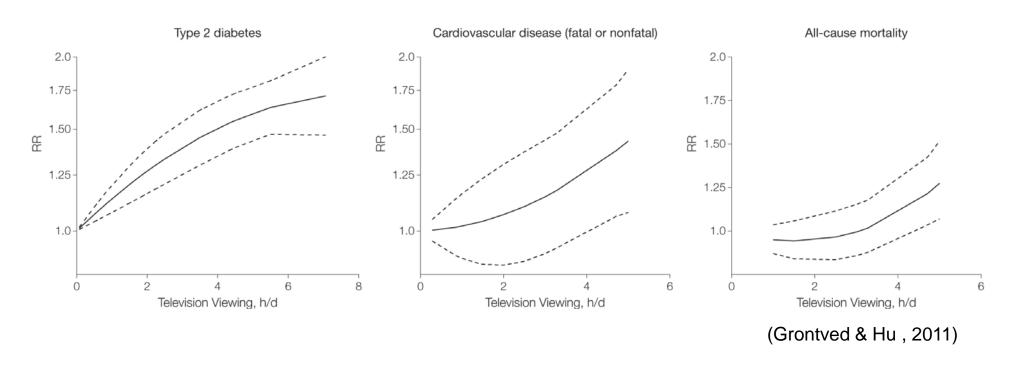
(European Commission, 2003)





# TV viewing and risk of disease

Dose-response Relationship Between Television Viewing and Risk of Type 2 Diabetes, Cardiovascular Disease, All-Cause Mortality







# TV food advertising and risk of obesity

TABLE 2—Fully Adjusted Regression of 2002 BMI z Scores on Television Viewing Among	
Children Aged 0-6 Years in 1997: Panel Survey of Income Dynamics	

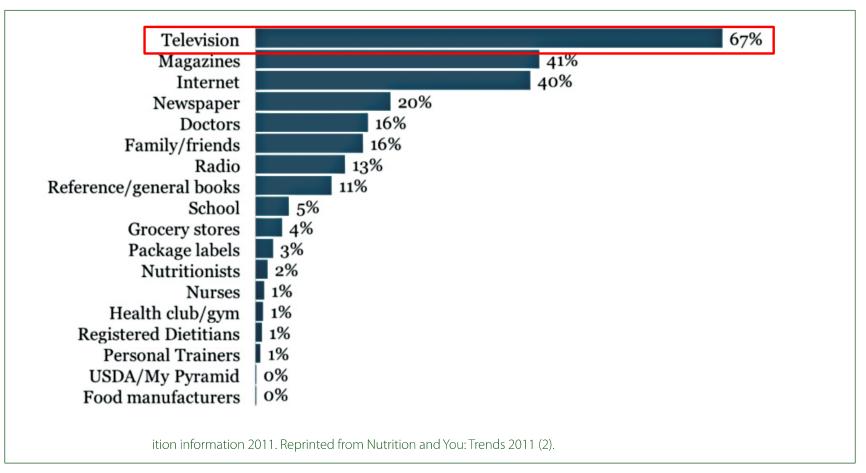
J	•	•	
	Model 1, <sup>a</sup> b (95% CI)	Model 2, <sup>b</sup> b (95% CI)	Model 3, <sup>c</sup> b (95% Cl
Television viewing in 1997, h/d			
Commercial	0.11**(0.00, 0.21)	0.11**(0.00, 0.21)	0.10**(0.00, 0.21)
Noncommercial	0.03 (-0.07, 0.14)	0.03 (-0.08, 0.13)	0.04 (-0.07, 0.14)
Television viewing in 2002, h/d			
Commercial	0.06 (-0.04, 0.16)	0.06 (-0.04, 0.16)	0.06 (-0.04, 0.17)
Noncommercial	0.00 (-0.10, 0.11)	0.01 (-0.10, 0.11)	0.00 (-0.10, 0.11)
Physical activity in 1997, min/d			
None (Ref)			
1-30		-0.06 (-0.34, 0.22)	
>30		0.01 (-0.21, 0.23)	
Physical activity in 2002, min/d			
None (Ref)			
1-30		-0.19 (-0.43, 0.05)	
>30		0.02 (-0.18, 0.21)	
Eating in front of the television			0.03 (-0.04, 0.10)
in 2002			
Adjusted R <sup>2</sup>	0.07	0.07	0.07

(Zimmerman & Bell, 2010)





#### Sources of nutrition information



(Academy of Nutrition and Dietetics,





#### **RESEARCH**

#### **Systematic review**



Steven Blackburn, Simon Brownsell and Mark S Hawley

School of Health and Related Research, University of Sheffield, UK

#### **Summary**

We conducted a systematic review of the applications and technical features of digital interactive television (DITV) in the health and social care fields. The Web of Knowledge and IEEE Xplore databases were searched for articles published between January 2000 and March 2010 which related to DITV systems facilitating the communication of information to/from an individual's home with either a health or social care application. Out of 1679 articles retrieved, 42 met the inclusion criteria and were selected for review. An additional 20 articles were obtained from online grey literature sources. Twenty-five DITV systems operating in health and social care were identified, including seven commercial systems. The most common applications were related to health care, such as vital signs monitoring (68% of systems) and health information or advice (56% of systems). The most common technical features of DITV systems were two-way communication (88%), medical peripherals (68%), on-screen messaging (48%) and video communication (36%). Digital interactive television has the potential to deliver health and social care to people in their own homes. However, the requirement for a high-bandwidth communications infrastructure, the usability of the systems, their level of personalisation and the lack of evidence regarding clinical and cost-effectiveness will all need to be addressed if this approach is to flourish.





# Our intervention Senior.Saúde.Come TV app

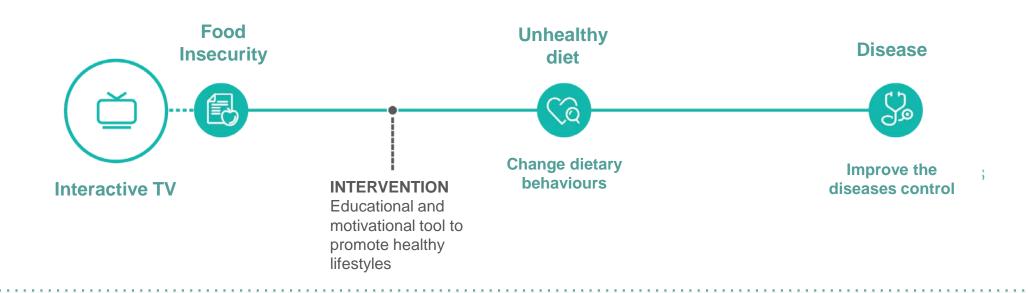
Motivation and literacy on healthy lifestyles tool in elderly





# Motivation and literacy on healthy lifestyles tool in elderly

#### **METHODOLOGY**





# Collecting data









https://www.youtube.com/watch?v=0jDLtow7dbl&feature=youtu.be





# Focus group results

## General appreciation

The TV app concept was highly appreciated by most participants.



- Useful
- Original
- Well designed
- Informative





# Focus group results

#### Adherence intention

The adherence intention to the TV app was high – all participants were willing to have this TV app in their homes

They feel that the TV app is a tool target for them and they were motivated to use it





# Two Groups

1.

What do the eldery want?

2.

TV app – how to improve and take the most of it?



# Share your conclusions



Remember 1, 2,3?

1. I cannot leave this room without saying...

2. I would like to tell you that...

3. I'm feeling that...

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Helena Canhão (Head of Unit) helena.canhao@nms.unl.pt

Obrigado / Thank You

http://cedoc.unl.pt/epidoc-unit/

www.saudepontocome.pt