

National Ageing Research Institute

**Report on the Development of a
Healthy Ageing Quiz**

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Final Report on the Development of a Healthy Ageing Quiz

Report from:

National Ageing Research Institute

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1) Introduction

There is an increasingly large body of evidence related to healthy ageing. However, there is no one place that draws this information together for individuals wanting to maximise their current and future health. One way to achieve this would be to develop a tool, based on scientific evidence, that enables older people and people approaching older age to make a judgement about the adequacy of their current lifestyle choices in terms of what is known about healthy ageing.

In 2009 the Productive Ageing Centre of National Seniors Australia funded the National Ageing Research Institute (NARI) to develop a Healthy Ageing Quiz. This report outlines the key findings from the development of the Healthy Ageing Quiz and includes the quiz as a key outcome of the project.

2) Project Aims and Objectives

This project aimed to increase awareness of factors associated with healthy ageing through the development of a Healthy Ageing Quiz. The quiz aims to provide older adults with an opportunity to assess their current state of health using an evidence-based and user-friendly method.

The quiz draws together evidence based information regarding healthy and positive ageing strategies, allowing older adults to;

- Have improved knowledge about healthy ageing and lifestyle choices with specific recommendations for improving health outcomes
- Assess areas of health that are being promoted and/or neglected
- Decrease their rates of chronic diseases through effective diet, exercise and other lifestyle management
- Make informed decisions regarding lifestyle behaviours.

The paper-based final version of the quiz is attached as Appendix A. It includes links to evidence based guidelines for healthy active ageing. A web-based version will also be developed. It is anticipated that the quiz will be widely disseminated, through websites, (including NARI, National Seniors Australia, Council on the Ageing) and through NARI presentations to groups, such as Planned Activity Groups, Senior Citizens Groups, Australian Independent Retirees and work-place health initiatives. It is possible for individuals to complete the quiz independently or as part of a group activity. It is also envisaged that the quiz will require further development (for example, to ensure relevance to people from culturally and linguistically diverse

[CALD] backgrounds) and updating. NARI will seek further funding to complete this work.

3) Method

The development of the quiz involves four phases, three of which have been completed. Prior to commencing the project, ethics approval was obtained through the Melbourne Health Human Research Ethics Committee. During Phase 1, an extensive literature review was conducted a) to identify the lifestyle factors associated with healthy ageing; b) to find any existing health questionnaires that could serve as a template; and c) to identify current guidelines with respect to the health and nutrition domains of interest.

During Phase 2, three focus groups with older adults were conducted to obtain feedback on the initial draft quiz (which was based on the literature findings) and to ascertain the health and lifestyle factors that are most important to them. Focus group participants were drawn from the NARI volunteer list and seniors groups. They were asked to comment on both the areas covered by the quiz and the formulation of questions.

An expert advisory panel was convened, including people with expertise in the main health risk areas associated with ageing. From NARI, this included Professor Keith Hill (falls and balance) and Dr Irene Blackberry (nutrition). Other panel members included Professor Helen Bartlett (healthy ageing), Mr John Lawrence (chronic illness and cultural diversity in ageing), Dr Dina LoGiudice (dementia and depression), Ms Claire Martin (nutrition), Dr Christine Walker (chronic illness), Professor Yvonne Wells (psycho-social ageing), and Professor John McCallum (risk factors associated with hospital and residential care admission in older people). The panel was asked to provide advice on the main areas identified through the literature review. A modified version of the quiz, based on the focus group findings, was presented to the panel, which led to further revision of the questions. Panel members also suggested useful links to resources and guidelines for older people wishing to know more about a particular area. This version of the Healthy Ageing Quiz was used in the next phase of the project.

In Phase 3, the quiz was piloted along with a battery of existing, validated measures (see Appendix B, Appendix C, Appendix D, Appendix E and Appendix F) to test the psychometric properties of the quiz (convergent and discriminant validity). Invitations to complete the quiz were published in the NARI newsletter and National Seniors' print and electronic newsletters. Members of the research team visited Planned Activity Groups (PAG) to recruit frailer participants. Letters of invitation were forwarded to NARI volunteers with an interest in healthy ageing and project team

members asked older friends and family members to complete the quiz. A second quiz was sent to a randomly selected sub-sample of participants to determine test-retest reliability. Results of the pilot phase were statistically analysed to establish the reliability and validity of the quiz. The size of the correlation coefficients was classified as small (0.10-0.29), medium (0.30-0.49) or large (0.50-1.0) (Cohen, 1988). Adjustments were made to the quiz following the piloting process.

Phase 4 of this project will involve the development of the final versions of the quiz, including a web-based version. The on-line version will be launched by a public figure who embodies healthy ageing (such as Peter Cundell). Print and television media will be invited to cover the event. NARI will seek further funding for the launch, once the web-based version of the quiz has been developed and tested.

3) Phase 1 & 2 Results

3.1) Summary of findings from the literature review

Bowling and Iles (2006) identified five broad models of successful or healthy ageing, each emphasising different domains. The biomedical model refers to the absence of chronic disease and risk factors for disease and includes high levels of physical and cognitive functioning. The broader biomedical model includes active engagement with life through the maintenance of autonomy and social support. Psychosocial models emphasise life satisfaction, social functioning and psychological resources. Social functioning models highlight positive relationships with others and social integration. Psychological resources models emphasise self-efficacy, a positive outlook and effective coping strategies. The final lay model, based on older people's perceptions, includes the various components listed above and a sense of humour, learning new things, financial security, productivity and spirituality. Although the literature highlights the need for a standard definition and consistency in the indicators used to measure healthy ageing, there is consensus that healthy ageing is multi-dimensional and involves more than just physical and functional health.

Some key modifiable lifestyle factors associated with healthy ageing include being physically active, not smoking, maintaining a healthy weight, having a healthy diet, moderate consumption of alcohol and engaging in cognitively stimulating activities. Modifiable psychosocial factors include autonomy and control (including self-efficacy), social and productive engagement (interpersonal relationships, social activities or groups, participating in work or volunteering) and social support (emotional and instrumental), having a positive/optimist attitude and effective coping strategies (resilience; mature adaptive defences), finding meaning in life and spirituality. Some chronic conditions, such as hypertension, depression, and the absence of protective factors were also associated with poorer outcomes. (Rowe & Kahn, 1987 & 1997;

Seeman and Chen, 2002; Valliant & Mukamal, 2001; Hartman-Stein, 2003; Heikkinen, 2003; Peel et al, 2004; Australian Institute of Health and Welfare, 2004; Topp et al, 2004; Depp & Jeste, 2006; Yates et al, 2008).

3.2) Findings from the focus groups

Three focus groups were conducted; two in metropolitan Melbourne and one in rural Victoria (Portarlington). There were 33 participants (9 males and 24 females) ranging in age from 54 to 97 years (mean 72.0±10.2 years).

Discussion of healthy ageing

Participants were first asked what healthy ageing meant to them and to identify the various components of healthy ageing. The focus group findings confirmed the literature review findings. All three groups indicated that although physical health impacted on healthy ageing, people could have health problems but still feel that they are ageing well. Keeping active both physically and mentally, being independent (physically and financially; making your own decisions) and being able to enjoy life were important factors associated with healthy ageing. Being productively (meaningfully) and socially engaged, having a purpose (a passion, making a difference, having someone/something that depends on you), being valued and respected were also mentioned by participants. Having a positive attitude (optimistic) and a sense of humour, seizing opportunities that come your way, accepting limitations and making the most of what you have, were key personality traits associated with healthy ageing. Volunteering, learning new skills, adapting your activities to meet your current circumstances/limitations were given as examples of accepting and adapting to change. Participants emphasised that planning life after retirement and replacing work (and work contacts) with other critical (parallel) activities (contacts) was vital. The rural group also highlighted the importance of pursuing instrumental support to help maintain independence.

Relationships with family, friends and community were seen as key factors associated with healthy ageing. Participants mentioned developing and maintaining good relationships, making new friends, joining groups and embracing in-laws. All three groups highlighted the importance of intergenerational contact.

Other factors identified included spiritual health, diet/nutrition, knowing your medication and regular checkups to address health issues early. The importance of adopting a healthy lifestyle when young was also highlighted although participants agreed that it was never too late to make changes. The groups also pointed out the multiple benefits of physical activity (it works the mind, the body and provides social contact), the importance of group activities in terms of socialising and the need to combat ageist stereotypes (their own and others).

Feedback regarding the quiz

Based on the literature review, a prototype of the quiz was developed. It comprised 20 questions related to modifiable lifestyle factors. A list of excluded factors (such as marital and socio-economic status and personality factors, such as optimism) was also discussed during the focus groups. Participants were asked to complete the draft quiz and provide feedback on the overall contents/format and each specific question.

Although participants generally agreed with the risk factors included in the first draft, some additional factors were suggested for a more holistic coverage. They included marital status/living arrangements, financial security, optimism, being opportunistic, self worth, instrumental and emotional support, reciprocity and isolation. Other suggestions included minor rewording of some questions, adding some additional definitions (eg falls, physical activity types), and minor restructuring of some of the scoring options.

Only two questions raised specific concerns. First, calculating body mass index (BMI) was seen to be too difficult, even with an example. A table of healthy weight ranges in relation to height was a preferred option. Second, although moderate alcohol consumption was associated with better outcomes in the healthy ageing literature, it is complex. For example, the new Australian alcohol guidelines provide additional advice and precautions for specific groups including older people. Using 10g of alcohol to describe a standard drink required further clarification.

The length and the time needed to complete the quiz (approximately 10 minutes) were acceptable to all participants. Participants liked the multi-rated scoring system and most preferred a paper-based version of the quiz. It was noted that instructions on how to use and complete the quiz were required.

4) Phase 3 Results

A total of 425 copies of the Healthy Ageing Quiz packages were mailed out for validity testing and 297 individuals returned a quiz (70% response rate). A complete quiz (all questions answered) was received from 280 respondents (94% completion rate). For the reliability study, 145 copies of the quiz were sent to a random sample of those who agreed to follow-up contact and 122 quizzes were returned (84% response rate). Over 95% of the second quizzes were fully completed.

4.1) Participants

The demographic and health characteristics of the validity and reliability samples are presented in Table 1. Respondents were aged from 49 to 100 years. The majority of participants were Caucasian women. There were no significant differences in

demographic or health characteristics between those who did and those who did not complete the quiz a second time.

Table 1: Demographic and health characteristics of the participants

	Validity study (N=297)	Reliability study (N=122)
Mean (SD*)		
Age (years)	71.0 (10.0)	70.0 (9.0)
Percentage (%)		
Gender (female)	69	70
Ethnicity (Caucasian)	89	90
Marital status (married)	61	66
Education (Tertiary)	45	46
Employment (Retired)	56	65
Pension (No)	48	48
Income (Sufficient)	81	86
Self-rated health status		
Very Good	36	43
Good	51	48
Chronic conditions		
None	14	17
1-3	52	67
4 or more	32	28

*SD = standard deviation

4.2) Responses to Healthy Ageing Quiz

As shown in Table 2, most of the respondents in the validity sample were currently practicing healthy lifestyle habits. They were active, ate a balanced diet, maintained a healthy body weight, engaged in mentally stimulating activities, were socially active and were optimistic. However, 63% of participants were in the high risk and very high risk categories for waist circumference. Activities to improve/maintain balance/mobility and cardiorespiratory activities were the most common types of exercise engaged in by respondents (75% and 62%, respectively) whilst only 35% of participants undertook strength/power training. Most people rated their general health as good (51%) or very good (36%). Only 12% respondents rated their general health as poor/fair.

The mean score of the Healthy Ageing Quiz (those fully completed) was 35 (SD 5) out of a maximum score of 46. Only one person obtained the maximum score. The scores were divided into poor, fair and good categories. The majority of respondents (223) scored between 31 and 46 (good), with 56 people scoring between 16 and 30 (fair). Only one person had a total score in the range of 0 – 15 (poor).

Table 2: Participants' responses to the Healthy Ageing Quiz questions

Quiz question	n (Percentage)
Q2. 30 minutes of moderately intense physical activity	
5 or more days/week	136 (46)
3-4 days a week	109 (37)
Q3. Types of exercise undertaken	
2 or more	200 (67)
Q4. Steadiness (no unsteadiness)	188 (63)
Q5. Falls in the last 12 months (none)	208 (70)
Q6. Smoking (never or stopped over 10 years ago)	272 (92)
Q7. Alcohol intake	
within recommended level	151 (51)
rarely/never	117 (39)
Q8. Body Mass Index (20-25 or up to 27 and aged over 65 years)	186 (63)
Q9. Waist circumference (under 80cm / under 94cm)	107 (36)
Q10. Diet (healthy and balanced mostly/always)	248 (83)
Q11. Regular meals (3 meals/day)	257 (87)
Q12. Chronic conditions	
None	78 (26)
1 or more but well managed	193 (65)
Q13. Visit to doctor in last 12 months (yes)	291 (98)
Q14. Sleeping (sleep well)	150 (51)
Q15. Mentally stimulating activities (5 days or more)	249 (84)
Q16. Socially/productively engaging activities	
5 days or more	137 (46)
3-4 days a week	106 (36)
Q17. Group activities (at least once a week)	181 (61)
Q18. Family/friends (5 days or more)	157 (53)
Q19. People you can depend on (definitely)	259 (87)
Q20. People you are close to (definitely)	259 (87)
Q21. Optimism (yes)	202 (68)
Q22. Look for opportunities (often/always)	212 (71)
Q23. Things to look forward to (often/always)	232 (78)

Note: Q1 – “In general, would you say your health is: very good/good/fair/poor” – is not a scored item

4.3) Validity

As expected, significant correlations were found between the total score on the Healthy Ageing Quiz, or components of the quiz, and the five questionnaires used to establish convergent validity (Table 3). These questionnaires were the Assessment of Quality of Life (AQoL), the Frenchay Activity Index (physical activity), the Duke Social Support Index (DSSI), the Revised Life Orientation Test (LOT-R, optimism)

and the Determine Your Nutritional Health (nutrition) questionnaire. For the AQoL and the nutrition questionnaire, a low score indicated better quality of life or nutrition thus a negative correlation was anticipated. The magnitude of the Pearson values was good to excellent, with the exception of the correlation between the nutrition/weight questions and the nutrition questionnaire. The shading in Table 3 highlights the main comparisons.

Given that all the questionnaires were health-related, multicollinearity was expected between the quiz components and the total scores of the validation measures. However, similar health domains (e.g. Healthy Ageing Quiz social support questions and the DSSI) were more strongly correlated than those that were unrelated (e.g. quiz social support questions and the nutrition questionnaire) thus providing evidence of discriminant validity. The Healthy Ageing Quiz total score was also significantly and positively correlated with self-reported health status ($r=.509$, $p<0.01$).

Table 3: Healthy Ageing Quiz (HAQ) correlations with other health-related measures

Healthy Ageing Quiz	AQoL ^a	LOT-R ^b	DSSI ^c	Nutrition ^d	Frenchay ^e
HAQ total score	-.685**	.452**	.439**	-.396**	.403**
HAQ activity sub score (Q2-4, 15, 16)	-.503**	.301**	.276**	-.198**	.455**
HAQ nutrition & weight (Q7-11)	-.193**	.066	.123*	-.259**	-.003
HAQ social support (Q17-20)	-.315**	.398**	.625**	-.171**	.171**
HAQ optimism (Q21-23)	-.469**	.599**	.343**	-.212**	.274**

^aN=290

^bN=276

^cN=285

^dN=238

^eN=290

** $p<0.01$

* $p<0.05$

4.4) Reliability

The average amount of time between completion of the quiz at Time 1 and Time 2 was 1.5 months. The intraclass correlation coefficient was .838 ($p<0.0001$) (95% CI .773 - .885), which indicates excellent test-retest reliability for the Healthy Ageing Quiz. A few respondents did mention that they had made some change to improve their lifestyle since completing the first quiz.

4.5) Feedback from quiz respondents

The overall response to the Healthy Ageing Quiz was very positive. Some participants noted that they were pleased to be part of the evaluation and thanked us for the opportunity to be involved; one participant appreciated being consulted.

The Healthy Ageing Quiz was seen to be comprehensive and “covered areas pertinent to a health assessment”. Ninety percent of participants reported that the questions in the Healthy Ageing Quiz were relevant to healthy ageing and 88% indicated that the questions were easy to understand.

For some participants there was some confusion about whether the evaluation survey referred to all enclosed questionnaires (Healthy Ageing Quiz, the Frenchay, AQoL, etc) and their evaluation responses referred to all questionnaires. This confusion was also confirmed in the reported time taken to complete the quiz; 123 (41%) people cited 20 minutes or more to complete the survey (maximum time cited was 120 minutes). Only three people stated that the quiz was too long or too wordy.

Participants appreciated the opportunity to review their own health. As one participant stated it “helped to make me think about [my] lifestyle”, another stated, “it is a good ‘wake up’ call re my health in specific areas. Hopefully the information will be of benefit to all”. Another participant stated that “it was thought provoking and useful to do. I would like to send it to a number of my ageing relatives!”

Many found the layout of the quiz to be excellent or good, clear and easy to follow, and the print size and style were seen as an advantage. One participant stated that the quiz followed a “logical progression” and the “instructions were clear”. Another stated they “liked [the] idea of [the] evaluation questions leading to scoring, leading to actions to help you age well” and another reported that the “multiple choice answers make easier completion”.

Some people queried whether the questionnaire was suitable for all older age groups (aged 50 years to those aged over 85 years). These responses may reflect commentary on all questionnaires (Frenchay, etc) rather than just the Healthy Ageing Quiz per se. However, comments included:

“ Good for older people – not really appropriate form my age group in general (aged 51)”

“No discernment between people in their 50s, 60s, 70s, 80s.”

“Feel aimed at 60 year olds maybe that is your aim [aged 87].”

“Biased towards classic old retired type respondents – not sure this is typical – particularly 50-65 years. Focussed on strange retired quiet life. Depressingly focussed on older retirement activities...Need to test with different type of respondents particularly those still working full time [58 year old]”

“Just a slight concern that people who are in full time work are not being taken into consideration quite as much as they could be. We don’t always have the free time or opportunities that retired folk have to do stuff! (aged 64).”

Yet, one participant stated that they were happy that it was not “just directed to older people” and another stated that “the quiz covers all aspects of ageing but it could be used for any stage of life.”

Questions were also raised in relation to its appropriateness for CALD and other sub-groups. Comments included:

“Seems suited to healthy, <80yo and or people with good English and post school education. The life battlers would have difficulty relating to all this. Could seem a bit oriented to academically trained people or people used to market/social research surveys. May need to run focus group research projects.”

“The quiz seems to suit city people but ignores the much more active lifestyle of country people. I spend half of each week on a farm and this involves much physical activity [reducing] the need for gym clubs etc. It also affects social contacts.”

“All clear and sensible but what about the isolated, unwell, housebound, NESB [non-English speaking background] who would have difficulty with a lot of these suggestions?”

One participant commented that the Healthy Ageing Quiz was “very good in most respects. BUT assumes that transport and the various health professional are readily available. One of the most fundamental priorities for healthy ageing is to be housed in a weatherproof building with provisions for heating and cooling. As well provision for washing self and clothing, a good stove and hot plate plus the necessary utensils. Suitable clothing [are also] necessary”.

These limitations are acknowledged. People who are from CALD groups, those on fixed incomes and people less educated may have a very different perspective on healthy ageing. Although a rural focus group was conducted (in Portarlinton) to scope rural attitudes and beliefs about healthy ageing, the focus group attendees may not have been representative of the general rural population.

Some suggestions were made to improve (including corrections) the Healthy Ageing Quiz. Some suggestions were incorporated into the modified quiz and some noted for further consideration or not included (see Appendix G).

Comments regarding the “Actions to help you age well”

Most of the respondents indicated that the information on pages 8 & 9 (Actions to help you age well) were excellent or very good, sensible, relevant, constructive, well written, easy to understand and that they contained good information and suggestions. Some comments included:

“Very clear and helpful if one needed any more encouragement.”

“Challenges someone like myself to make sure I keep doing what is useful and to recommit to the areas where I am falling short.”

“Very satisfactory, to take note of excellent suggestions – congratulations!!”

“I am trying hard to partake in all Actions on pages 8 & 9 as exercise of body and mind give me a feeling of well being, and are more important as we age.”

“Helpful to keep, I have circled areas where I hope to improve.”

“It’s helpful to have the examples complementing the statements and advice. Also having website links to refer to is very useful.”

Once again a number of comments and suggestions were included (see Appendix G). Some suggestions were incorporated into the modified quiz.

Some people mentioned that the actions “highlighted things I already knew” or “were aware of” and that the suggested actions “didn’t tell me anything I didn’t know”. However, many more felt that it was good to have this information reinforced, and that some people may not be aware of these issues.

“All things that we know already but need to be reminded about!”

“Great idea. Useful suggestions for people who may not be aware there are things they can do to help them cope with their situation.”

“ This all is grist for the mill – I have learned a lot along the way. It is healthy to keep the issues to the front of consciousness.”

The issue of the difference between knowing and acting on information was also raised.

“Sometimes taking action alone is difficult – you need support and encouragement and the will not to give in to the ageing process.”

“I know most of the information given. That does not mean I will act on it.”

“Good ideas thank you. It is one thing to KNOW what to do – it is another to actually DO it!”

A suggestion made by two participants involved including an action plan. Although this does not in itself guarantee action, it may serve as a good starting point for those who are contemplating making a behaviour change. An action plan was also developed and included in the modified Healthy Ageing Quiz.

Two people commented on the importance of providing honest responses to the quiz questions to give an “overall lifestyle picture”. This is an issue related to all self-reported questionnaires and a factor that needs to be considered in future research.

5) Conclusion and next steps

This project has been successful in developing an evidence-based user-friendly quiz that enables older people and people approaching older age to evaluate their current lifestyle choices and make changes as required. The quiz questions were drawn from the published literature and consultations with older people and experts in healthy ageing. The quiz demonstrated good psychometric properties. Survey respondents were generally happy with the format, layout and content of the quiz. Concerns regarding the question related to BMI were addressed to facilitate completion of the quiz (some people did not complete the BMI question).

A limitation of this study was that respondents were mainly healthy older people so there was limited variation in scores. Future research with the quiz should target frailer groups to see whether it is acceptable and practical in these populations and to determine differences between the various age groups (50, 60, 70 years and older). At this stage the quiz is only available in English and requires further validation with CALD populations.

The next step is to develop the web-based version of the quiz and to formally launch the quiz. In addition, the NARI project team will discuss further development of the quiz with National Seniors and identify avenues from which funding can be sought for these activities.

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HEALTHY AGEING QUIZ

This quiz will help you determine whether your current lifestyle choices are helping you age well. If you are 50 years of age or over, male or female, this quiz is for you.

Instructions

- The quiz will take about 10 minutes to complete.
- For each question, tick the most appropriate response based on your current circumstances (unless otherwise specified).
- Select the option that best describes your regular activities/behaviour in a typical week. If you cannot decide between two scoring options, tick the lower scored option.
- Add up your score and refer to page 6 to see what your score tells you about your current lifestyle choices.
- **Regardless of your final score**, go through the quiz and highlight the questions where you have scored less than two points (or 4 points for question 3), which is the top score for each question. These are considered possible risk factors for you.
- Once you have identified your **individual risk factors**, refer to the list of actions (pages 8-9) you can take to reduce or eliminate the risk factor.
- If English is not your first language, ask a family member or friend to help you complete the quiz.
- It may be worth talking to your doctor about the quiz results to see what other actions you can take.

		Sub-total from page 2	_____
6.	Do you smoke or have you ever smoked?		
	<input type="checkbox"/> Yes, I currently smoke (this includes being an occasional smoker)	0	
	<input type="checkbox"/> I do not smoke but others smoke around me	1	
	<input type="checkbox"/> I was a smoker but stopped within the last 10 years	1	
	<input type="checkbox"/> Never smoked or stopped over 10 years ago	2	_____
7.	The recommended level for low-risk drinking is two standard drinks a day or less for healthy men and women, and no more than four drinks on any one occasion. A standard drink contains 10g of alcohol (equal to 12.5ml of pure alcohol). That is 100ml of (12%) wine; 285ml of full strength beer or 570ml of light (2.2%) beer; 60ml of (18%) sherry and 30ml of (40%) spirits. Do you drink more than the recommended level?		
	<input type="checkbox"/> Yes, I drink more than the recommended level	0	
	<input type="checkbox"/> No, I drink within the recommended level	2	
	<input type="checkbox"/> I never or rarely drink	2	_____
8.	Body mass index (BMI) is a measure of body fat based on height and weight. Is your BMI within the normal range, that is between 20 to 25? [See body mass index table on page 7].		
	<input type="checkbox"/> My BMI is between 20 to 25	2	
	<input type="checkbox"/> My BMI is between 26-27 but I am over 65 years of age	2	
	<input type="checkbox"/> My BMI is above 25	0	
	<input type="checkbox"/> My BMI is below 20	0	_____
9.	What is your waist circumference? Place the tape measure directly on your skin, roughly in line with your belly button, breathe out normally and measure. The tape should be snug but not squeezing the skin.		
	For Men: <input type="checkbox"/> 102cm and over (40.2") (very high risk)	0	
	<input type="checkbox"/> Below 102cm but over 94cm (37") (high risk)	1	
	<input type="checkbox"/> 94cm or under	2	_____
	For Women: <input type="checkbox"/> 90cm and over (35.4") (very high risk)	0	
	<input type="checkbox"/> Below 90cm but over 80cm (31.5") (high risk)	1	
	<input type="checkbox"/> 80cm or under	2	_____
		PROGRESSIVE SUB-TOTAL	_____

Sub-total from page 4	_____
<p>14. Do you have difficulty sleeping?</p> <p><input type="checkbox"/> I generally sleep well 2</p> <p><input type="checkbox"/> My sleep is interrupted but I usually go back to sleep without difficulty 1</p> <p><input type="checkbox"/> I generally have difficulty sleeping 0</p>	_____
<p>15. In a typical week, do you engage in activities that challenge/stimulate your mind most days of the week? For example, activities such as reading, writing, playing a musical instrument, playing games (cards, checkers, doing crosswords), watching stimulating TV programs (such as documentaries) and learning new activities/skills.</p> <p><input type="checkbox"/> Yes, 5 days or more a week 2</p> <p><input type="checkbox"/> 3-4 days a week 1</p> <p><input type="checkbox"/> 0-2 days a week 0</p>	_____
<p>16. In a typical week, do you have activities that keep you socially and productively engaged (ie that are worthwhile and satisfying)? For example church or volunteer work, paid work, taking care of your grandchildren, or creative or craft activities.</p> <p><input type="checkbox"/> Yes, 5 days or more a week 2</p> <p><input type="checkbox"/> 3-4 days a week 1</p> <p><input type="checkbox"/> 0-2 days a week 0</p>	_____
<p>17. Are you involved in any group activities (formal or informal), community or religious organisations (in total at least once a week)? For example, lawn bowls, golf club, choir, reading group, church activities, Probus etc.</p> <p><input type="checkbox"/> At least once a week 2</p> <p><input type="checkbox"/> Once or twice a month (not weekly) 1</p> <p><input type="checkbox"/> Rarely 0</p>	_____
<p>18. How often do you see or hear from family and/or friends in a typical week?</p> <p><input type="checkbox"/> Yes, 5 days or more a week 2</p> <p><input type="checkbox"/> 3-4 days a week 1</p> <p><input type="checkbox"/> 0-2 days a week 0</p>	_____
PROGRESSIVE SUB-TOTAL	_____

Sub-total from page 5	_____
19. Do you have people you feel you can depend on? <input type="checkbox"/> I definitely do (2) <input type="checkbox"/> I do to some degree (1) <input type="checkbox"/> I definitely do not (0)	_____
20. Do you have people you feel very close to? <input type="checkbox"/> I definitely do (2) <input type="checkbox"/> I do to some degree (1) <input type="checkbox"/> I definitely do not (0)	_____
21. Are you generally an optimistic person? <input type="checkbox"/> No (0) <input type="checkbox"/> To some degree (1) <input type="checkbox"/> Yes (2)	_____
22. I always look for opportunities that maximise what I can still do or find new activities to meet my current abilities or circumstances? <input type="checkbox"/> Never or rarely (0) <input type="checkbox"/> Sometimes (1) <input type="checkbox"/> Often or always (2)	_____
23. Are there things that you look forward to each day? <input type="checkbox"/> Never or rarely (0) <input type="checkbox"/> Sometimes (1) <input type="checkbox"/> Often or always (2)	_____
TOTAL SCORE	_____

Score ratings

Poor: A score of 0-15 - There are many areas in your lifestyle that could be negatively impacting on your chances of ageing well. Go through the quiz and highlight each question where you have scored less than 2 points (or 4 points for question 3). Then check the list of actions on pages 8-9 to see what you can do to improve each risk factor.

Fair: A score of 16-30 - Although there are some areas in your lifestyle that are helping you age well, there are other areas that are letting you down. Go through the quiz and highlight each question where you have scored less than 2 points (or 4 points for question 3). Then check the list of actions on pages 8-9 to see what you can do to improve each risk factor.

Good: A score of 31-46 - You have adopted many positive lifestyle choices that are maximising your chances of ageing well. To further enhance your chances, go through the quiz and highlight each question where you have scored less than 2 points (or 4 points for question 3). Then check the list of actions on pages 8-9 to see what you can do to improve each risk factor.

Table of Acceptable Weights For Height

Based on Body Mass Index (BMI) in the range of 20-25. Suitable for use with both men and women over 18 years of age.				Based on Body Mass Index (BMI) in the range of 26-27. Acceptable BMI if aged 65 and over.	
cm	feet, inches	kg	stone, pounds	kg	stone, pounds
140	4,7	39-49	6,2 – 7,10	50-53	7,12 – 8,5
142	4,8	40-50	6,4 – 7,12	51-54	8,0 – 8,7
144	4,9	41-52	6,6 – 8,3	53-56	8,5 – 8,11
146	4,9.5	43-53	6,11 – 8,5	54-57	8,7 – 8,14
148	4,10	44-55	6,13 – 8,9	56-59	8,11 – 9,4
150	4,11	45-56	7,1 – 8,11	57-60	8,14 – 9,6
152	5,0	46-58	7,3 – 9,2	58-62	9,2 – 9,11
154	5,0.5	47-59	7,6 – 9,4	59-64	9,4 – 10,1
156	5,1.5	49-61	7,10 – 9,8	62-65	9,11 – 10,3
158	5,2	50-62	7,12 – 9,11	63-67	9,13 – 10,8
160	5,3	51-64	8,0 – 10,1	65-69	10,3 – 10,12
162	5,4	52-66	8,3 – 10,5.5	67-70	10,8 – 11,0
164	5,4.5	54-67	8,7 – 10,8	68-72	10,10 – 11,5
166	5,5	55-69	8,9 – 10,12	70-74	11,0 – 11,9
168	5,6	56-71	8,11 – 11,3	72-76	11,5 – 11,14
170	5,7	58-72	9,2 – 11,5	73-78	11,7 – 12,4
172	5,8	59-74	9,4 – 11,9	75-80	11,11 – 12,8
174	5,8.5	61-76	9,8 – 12,0	77-81	12,2 – 12,11
176	5,9	62-77	9,11 – 12,2	78-83	12,4 – 13,1
178	5,10	63-79	9,13 – 12,6	80-85	12,8 – 13,5
180	5,11	65-81	10,3 – 12,11	82-87	12,13 – 13,10
182	5,11.5	66-83	10,5.5 – 13,1	84-89	13,3 – 14,0
184	6,0.5	68-85	10,10 – 13,5	86-91	13,8 – 14,5
186	6,1	69-86	10,12 – 13,8	87-93	13,10 – 14,9
188	6,2	71-88	11,3 – 13,12	89-95	14,0 – 14,13
190	6,3	72-90	11,5 – 14,2	91-97	14,5 – 15,4
192	6,3.5	74-92	11,9 – 14,7	93-99	14,9 – 15,8
194	6,4	75-94	11,11 – 14,11	95-101	14,13 – 15,13
196	6,5	77-96	12,2 – 15,2	97-103	15,4 – 16,3
198	6,6	78-98	12,4 – 15,6	99-106	15,8 – 16,10
200	6,7	80-100	12,8 – 15,10.5	101-108	15,13 – 17,0

Modified from: Dietitians' Pocket Book November 2004 School of Public Health, Department of Nutrition, Dietetics and Food Science, Curtin University of Technology

Instructions: Find your height in the table (note 160cm is 1.6m); if your weight is in the range listed on that line (51-64 kg) in the first half of the table then your BMI is within the 20-25 range. If your weight is in the second half of the table (65 to 69) then your BMI is in the range of 26 to 27. If your weight is either below or over the weight range listed, then your BMI is below or over that BMI range (20-25 or 26-27).

To calculate your specific BMI: You will need to divide your weight in kilograms by your height squared: kg/m^2

$$\text{Example: } \frac{70 \text{ kg}}{1.6 \text{ m} \times 1.6 \text{ m}} = \frac{70}{2.56} = 27.3$$

HEALTHY AGEING QUIZ – ACTIONS TO HELP YOU AGE WELL

Questions 2 and 3: **Physical activity**

- Aim to do at least 30 minutes of moderate activity each day. The 30 minutes can be done in 10-15 minute blocks and can include structured exercise or physical activity such as gardening or walking.
 - Include a variety of exercises that help improve your function and independence: strength/power training, balance, mobility and cardiorespiratory activities and flexibility.
 - Exercise programs are available through local councils, gyms and community health centres, or a physiotherapist can develop an individually tailored program for you.
 - See the new physical activity guidelines for older people on the National Ageing Research Institute's (NARI) website (www.nari.unimelb.edu.au) or call on 8387 2148.
 - Physical activity is good for both your body and your mind.
-

Question 4 and 5: **Balance and falls**

- If you have concerns about your balance, or have fallen, investigate the cause. A number of factors could be contributing to the problem including vision, muscle weakness, balance problems, inactivity, medication, certain medical conditions, foot problems or inappropriate footwear.
 - For further information about fall risk factors and strategies to prevent falls, talk to your doctor or see the following websites: NARI - www.nari.unimelb.edu.au or the Victorian Department of Human Services - <http://www.health.vic.gov.au/agedcare/maintaining/falls/seniors/info.htm>
-

Question 6 and 7: **Smoking and Alcohol Use**

- Quit smoking now! Speak to your doctor or ring the Quitline on 137848 (or check their website: <http://www.quit.org.au/> for strategies to help you beat the habit.
 - Although there are some health benefits associated with some moderate alcohol use (eg, a glass of red wine), use alcohol wisely – drink within the recommended level for low risk drinking. For older people it may be preferable to drink less or no alcohol because the body's ability to process alcohol decreases with age and alcohol can interact with your medication. The guidelines (and precautions for older people and other subgroups) can be downloaded from <http://www.nhmrc.gov.au/publications/synopses/ds10syn.htm>
-

Questions 8 and 9: **Weight**

- Being overweight or obese, or underweight, increases your risk of many chronic diseases. Ensure your weight is within the healthy range for your height.
 - If you do not know your Body Mass Index (BMI) or waist measurement, talk to your doctor. Your Body Mass Index should be between 20 and 25. If you are over 65 years of age a BMI of 26-27 is also acceptable. Your waist circumference should be 80cm or less for women and 94cm or less for men.
 - To control your weight, eat a healthy balanced meal (see below) and exercise regularly (see above).
 - Your doctor or a dietician can also provide other advice on ways to reduce your weight.
-

Questions 10 and 11: **Diet**

- Your body needs fuel for energy and vitamins and minerals to function efficiently and for this you need a healthy, balanced diet. Poor diet is associated with many preventable chronic diseases.
- Aim to eat three meals each day (or more frequent smaller meals).
- Ensure that your diet meets the guidelines for healthy eating. Your diet should include: 5 vegetables and 2 fruits a day (including legumes), cereals (breads, rice, pasta, noodles, preferably wholemeal), at least three servings of calcium-rich foods (eg milk, yoghurt, cheese), lean meat, fish, poultry and/or eggs, legumes and nuts and plenty of fluids (approx. 6-8 glasses a day). Your diet should be low in salt,

sugar (including food and drinks containing sugar) and fat. To download the guidelines: <http://www.nhmrc.gov.au/publications/synopses/files/n31.pdf>.

- A dietician can help you develop a healthy meal plan.
-

Question 12 –13: **Chronic conditions and medical care**

- Learn all you can about your chronic condition – what helps the condition and what makes it worse. Talk to your doctor or contact a relevant chronic disease association. These organisations can be found in the yellow pages under “Associations” (eg, Arthritis Foundation, Diabetes Australia, Cancer Council of Australia, Kidney Health Australia, National Heart Foundation of Australia, National Stroke Foundation).
 - Understand the medication you take, their side effects and any contraindications, talk to your doctor or pharmacist. Ask them about a Home Medicines Review.
 - Have a general check up each year, as early detection of problems improves outcomes. If aged 75 and over (or 55 years and over if an Aboriginal and Torres Strait Islander) ask your doctor about the Older Person’s Health Assessment.
-

Question 14: **Sleep**

- Your body needs sleep to repair any cell damage and to refresh your immune system. A good nights sleep (generally 8 hours) helps your concentration and your memory function.
 - Avoid smoking or consuming alcohol or caffeine before bedtime, avoid too much daytime napping, establish regular sleep hours and a routine, and keep active during the day. Exposure to sunlight (at least 2 hours a day) helps regulate your sleep-wake cycle. Limit the use of sleeping tablets; they are a short term solution and can cause long term health problems.
 - Investigate the causes of sleep problems and address them. They may include pain, medication, lack of exercise, psychological stress or sleep disorders, such as sleep apnoea. Talk to your doctor.
-

Questions 15: **Stimulating your mind**

- Just like your body, you need to keep your mind active.
 - Learn a new skill or take up a new hobby (eg painting, carpentry), do a short course, read, write, do crosswords puzzles, learn to play a musical instrument or a foreign language.
 - Keeping physically and socially active also helps.
 - If you have concerns about your memory, see your doctor.
-

Questions 16-20: **Social connection and productive engagement**

- Do things that make you happy and that are worthwhile to you – this may include working, looking after grandchildren, volunteering, and doing creative arts and crafts.
 - Take time to develop and nurture your relationships with family and friends; not only are they people you can turn to in need, but they provide a social outlet and companionship.
 - Group activities and volunteering give you an opportunity to meet new people.
 - If you feel lonely and isolated, speak to someone – a family member or friend, your doctor, a social worker or a psychologist.
 - If you have persistent symptoms of low mood, see your doctor.
-

Questions 21-23: **Optimism and adaption**

- It is important to have something to look forward to each day, no matter how big or small.
 - Keep a positive attitude and an open mind to opportunities that come your way.
 - Plan your retirement, including what you will do to keep mentally and physically active.
 - If your health changes, look at what you can do and not what you can no longer do.
-

KEEP ACTIVE, EAT WELL, STAY CONNECTED

HEALTHY AGEING QUIZ

ACTION PLAN

Life style risk factor	Action to address risk factor
	Actions: People/groups to contact: Date to be completed:
	Actions: People/groups to contact: Date to be completed:
	Actions: People/groups to contact: Date to be completed:
	Actions: People/groups to contact: Date to be completed:

Additional notes:

Appendix B

ASSESSMENT OF QUALITY OF LIFE

INSTRUCTIONS

Please circle the alternative that best describes you during the last week.

1. Concerning my use of prescribed medicines:
 - I do not or rarely use any medicines at all
 - I use one or two medicinal drugs regularly
 - I need to use three or four medicinal drugs regularly
 - I use five or more medicinal drugs regularly

2. To what extent do I rely on medicines or a medical aid? (NOT glasses or a hearing aid.) (For example: walking frame, wheelchair, prosthesis etc.)
 - I do not use any medicines and/or medical aids
 - I occasionally use medicines and/or medical aids
 - I regularly use medicines and/or medical aids
 - I have to constantly take medicines or use a medical aid

3. Do I need regular medical treatment from a doctor or other health professional?
 - I do not need regular medical treatment
 - Although I have some regular medical treatment, I am not dependent on this
 - I am dependent on having regular medical treatment
 - My life is dependent upon regular medical treatment

4. Do I need any help looking after myself?
 - I need no help at all
 - Occasionally I need some help with personal care tasks
 - I need help with the more difficult personal care tasks
 - I need daily help with most or all personal care tasks

5. When doing household tasks: (For example, preparing food, gardening, using the video recorder, radio, telephone or washing the car)
- I need no help at all
 - Occasionally I need some help with household tasks
 - I need help with the more difficult household tasks
 - I need daily help with most or all household tasks
6. Thinking about how easily I can get around my home and community:
- I get around my home and community by myself without any difficulty
 - I find it difficult to get around my home and community by myself
 - I cannot get around the community by myself, but I can get around my home with some difficulty
 - I cannot get around either the community or my home by myself
7. Because of my health, my relationships (eg: with my friends, partner or parents) generally:
- Are very close and warm
 - Are sometimes close and warm
 - Are seldom close and warm
 - I have no close and warm relationships
8. Thinking about my relationship with other people:
- I have plenty of friends, and am never lonely
 - Although I have friends, I am occasionally lonely
 - I have some friends, but am often lonely for company
 - I am socially isolated and feel lonely
9. Thinking about my health and my relationship with my family:
- My role in the family is unaffected by my health
 - There are some parts of my family role I cannot carry out
 - There are many parts of my family role I cannot carry out
 - I cannot carry out any part of my family role

10. Thinking about my vision, including when using my glasses or contact lenses if needed:

- o I see normally
- o I have some difficulty focusing on things, or I do not see them sharply. *For example: small print, a newspaper, or seeing objects in the distance.*
- o I have a lot of difficulty seeing things. My vision is blurred. *For example: I can see just enough to get by with*
- o I only see general shapes, or am blind. *For example: I need a guide to move around*

11. Thinking about my hearing, including using my hearing aid if needed:

- o I hear normally
- o I have some difficulty hearing or I do not hear clearly. *For example, I ask people to speak up, or turn up the TV or radio volume*
- o I have difficulty hearing things clearly. *For example, Often I do not understand what is said. I usually do not take part in conversations because I cannot hear what is said.*
- o I hear very little indeed. *For example: I cannot fully understand loud voices speaking directly to me.*

12. When I communicate with others: (For example: by talking, listening, writing or signing)

- o I have no trouble speaking to them or understanding what they are saying
- o I have some difficulty being understood by people who do not know me. I have no trouble understanding what others are saying to me
- o I am only understood by people who know me well. I have great trouble understanding what others are saying to me
- o I cannot adequately communicate with others

13. If I think about how I sleep:

- I am able to sleep without difficulty most of the time
- My sleep is interrupted some of the time, but I am usually able to go back to sleep without difficulty
- My sleep is interrupted most nights, but I am usually able to go back to sleep without difficulty
- I sleep in short bursts only. I am awake most of the night

14. Thinking about how I generally feel:

- I do not feel anxious, worried or depressed
- I am slightly anxious, worried or depressed
- I feel moderately anxious, worried or depressed
- I am extremely anxious, worried or depressed

15. How much pain or discomfort do I experience?

- None at all
- I have moderate pain
- I suffer from severe pain
- I suffer unbearable pain

Appendix C

Frenchay Activities Index

For the items on the next page, please consider your actual frequency of activity over the recent past, not your past performance nor your potential ability.

Definitions for each Item

- 1. Prepare main meals:** Needs to play substantial part in organisation, preparation and cooking of main meal. Not just making snacks.
- 2. Wash up:** Must do it all or share equally, eg. washing, or wiping and putting away. Not just rinsing an occasional item.
- 3. Wash clothes:** Organisation of washing and drying of clothes, whether in washing machine, by hand wash, or at laundrette.
- 4. Light housework:** Dusting, polishing, tidying small objects. Anything heavier is included in '5'.
- 5. Heavy housework:** All housework including making beds, cleaning floors and fires, moving chairs etc.
- 6. Local shopping:** Playing a substantial role in organising and buying shopping, whether small or large amounts. Must go to shops and not just push a trolley.
- 7. Social outing:** Going out to clubs, church activities, cinema, theatre, drinking, to dinner with friends, etc. May be transported there, provided he or she takes an active part once arrived. The common factor is activity not travel.
- 8. Walk outside>15min:** Sustained walking for at least 15 minutes (allowed short stops for breath).About one mile. Can include walking to do shopping provided he/she goes far enough.
- 9. Pursue active interest in hobby:** Must require some 'active' participation and thought eg. propagating plants in the house, knitting, painting, games, sports. Not just watching sport on television.
- 10. Drive car/Travel on bus:** Needs to drive car (not just be a passenger in a car) or get to a bus coach and travel on it.
- 11. Outings/car rides:** Coach or rail trips, or car rides to some place for pleasure. Not for routine 'social outing' (ie: shopping, going to local friends/family). Must involve some organisation or decision-making by the person. Excludes trips organised passively by institution, unless person can choose whether to go or not. The common factor is travel for pleasure.
- 12. Gardening:** Outside: Light = occasional weeding, Moderate = regular weeding, pruning etc, Heavy = all necessary work, including heavy digging.
- 13. Household &/or car maintenance:** Light = repairing small items, Moderate = some painting or decorating, routine car maintenance, Heavy = most necessary household/car maintenance and repairs.
- 14. Reading books:** Must be full length books; not magazines, periodicals or papers.
- 15. Gainful work:** Work for which person is paid (not voluntary work).

Continues on back of page...

Frenchay Activities Index

Please indicate how often you do the following activities by placing a tick in the corresponding box.

Prepare main meals	<input type="checkbox"/> never	<input type="checkbox"/> 1x/week	<input type="checkbox"/> 1-2x/week	<input type="checkbox"/> most days
Wash up	<input type="checkbox"/> never	<input type="checkbox"/> 1x/week	<input type="checkbox"/> 1-2x/week	<input type="checkbox"/> most days
Wash clothes	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Light housework	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Heavy housework	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Local shopping	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Social outing	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Walk outside >15min	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Active interest in hobby	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Drives/taxi/bus	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/3month	<input type="checkbox"/> 3-12x3/months	<input type="checkbox"/> at least once weekly
Outings /car rides (6mths)	<input type="checkbox"/> never	<input type="checkbox"/> 1-2x/6month	<input type="checkbox"/> 3-12x6/months	<input type="checkbox"/> at least once weekly
Gardening	<input type="checkbox"/> never	<input type="checkbox"/> light	<input type="checkbox"/> moderate	<input type="checkbox"/> all necessary
Household and/or car maintenance	<input type="checkbox"/> never	<input type="checkbox"/> light	<input type="checkbox"/> moderate	<input type="checkbox"/> all necessary
Reading books	<input type="checkbox"/> never	<input type="checkbox"/> 1 in 6months	<input type="checkbox"/> 1/fortnight	<input type="checkbox"/> >1/fortnight
Gainful work	<input type="checkbox"/> never	<input type="checkbox"/> up to 10hr/week	<input type="checkbox"/> 10-30hr/week	<input type="checkbox"/> >30 hr/week

For office use only

Score

--	--

References:

1. Bond MJ, Harris RD, Smith DS, Clark MS (1992) "An examination of the factor structure of the Frenchay Activities Index". *Disability Rehabilitation*, Jan-Mar :**14**(1); 27-9.
2. Turnbull JC, Kersten P, Habib M, McLellan L, Mullee MA, George S. (2000) "Validation of the Frenchay Activities Index in a general population aged 16 years and older". *Archives of Physical Medicine and Rehabilitation*. **81**(8): 1034-8.

Appendix D

Duke Social Support Index

1. How many persons in this area within one hours travel (of your home/from here) do you feel you can depend on or feel very close to? Do not include members of your own family.

Number (of persons)	
None	00

2. How many times during the past week did you spend some time with someone who does not live with you? For example, you went to see them or they came to visit you, or you went out together?

None	00
Once	01
Twice	02
Three times	03
Four	04
Five	05
Six	06
Seven or more	07

3. How many times did you talk to someone – friends, relatives or others – on the telephone in the past week (either they called you, or you called them?)

None	00
Once	01
Twice	02
Three times	03
Four	04
Five	05
Six	06
Seven or more	07

4. About how often did you go to meetings of social clubs, religious meetings, or other groups that you belong to in the past week?

None	00
Once	01
Twice	02
Three times	03
Four	04
Five	05
Six	06
Seven or more	07

5. Does it seem that your family and friends (i.e, people who are important to you) understand you most of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

6. Do you feel useful to your family and friends (i.e., people important to you) most of the time, some of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

7. Do you know what is going on with your family and friends most of the time, some of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

8. When you are talking with your family and friends, do you feel you are being listened to most of the time, some of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

9. Do you feel you have a definite role (place) in your family and among your friends most of the time, some of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

10. Can you talk about your deepest problems with at least some of your family and friends most of the time, some of the time, or hardly ever?

Hardly ever	1
Some	2
Most	3

11. How satisfied are you with the kinds of relationships you have with your family and friends, very dissatisfied, somewhat dissatisfied, or satisfied?

Very dissatisfied	1
Somewhat dissatisfied	2
Satisfied	3

IF NO FAMILY AND FRIENDS would you say that you are very dissatisfied, somewhat dissatisfied or satisfied with not having any of these relationships?

For office use only:

Social interaction (items 1-4)	
Satisfaction (items 5-11)	
Total DSSI	

(Score range 11-33)

Appendix E

Revised Life Orientation Test (LOT –R)

Instructions: Please answer the following questions about yourself by indicating the extent of your agreement using the following scale:

[0] = Strongly Disagree

[1] = Disagree

[2] = Neutral

[3] = Agree

[4] = Strongly Agree

Be as honest as you can throughout, and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

_____ 1. In uncertain times, I usually expect the best.

_____ 2. It's easy for me to relax.

_____ 3. If something can go wrong for me, it will.

_____ 4. I'm always optimistic about my future.

_____ 5. I enjoy my friends a lot.

_____ 6. It's important for me to keep busy.

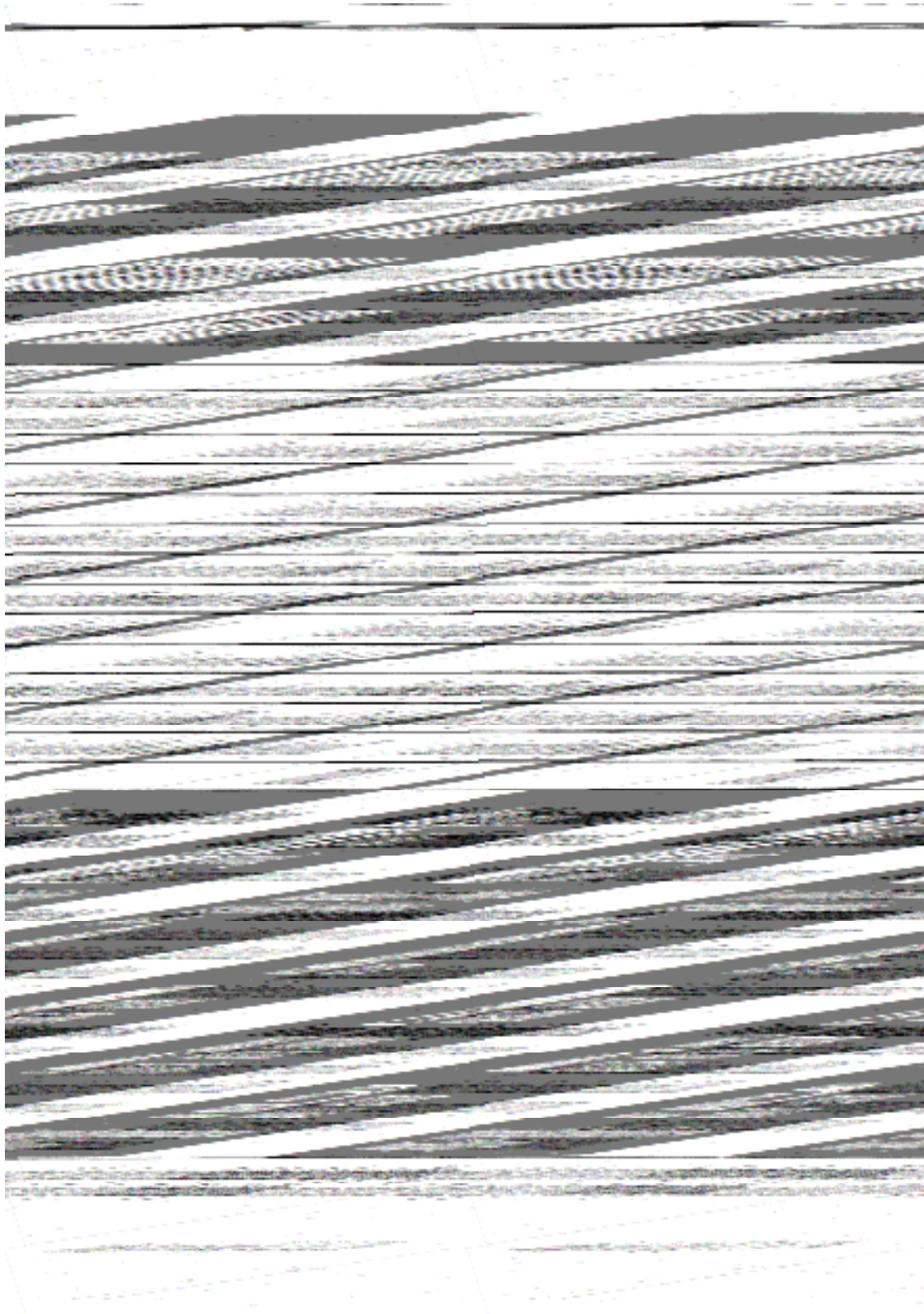
_____ 7. I hardly ever expect things to go my way.

_____ 8. I don't get upset too easily.

_____ 9. I rarely count on good things happening to me.

_____ 10. Overall, I expect more good things to happen to me than bad.

Appendix F



The Nutrition Checklist for the older person is based on the Warning Signs described below. Use the word **DETERMINE** to remind you of the Warning Signs.

DISEASE

Any disease, illness or chronic condition which causes you to change the way you eat, or makes it hard for you to eat, puts your nutritional health at risk. Four out of five adults have chronic diseases that are affected by diet. Confusion or memory loss that keeps getting worse affects one in twenty older adults 65-75 and one in five over 85 years. This can make it hard to remember what, when or if you've eaten. Feeling sad or depressed, which happens to about one in seven older Australians, can cause big changes in appetite, digestion, energy level, weight and well-being.

EATING POORLY

Eating too little and eating too much both lead to poor health. Eating the same foods day after day or not eating fruit, vegetables, and milk products daily will also cause poor nutritional health. In a survey in 1992 16% of older adults aged 70 and over stated that their appetite was only fair, poor or very poor in the last month. Nearly 10% of older adults do not eat the recommended amount of fruit and vegetables. One in seven older adults drink too much alcohol. Many health problems become worse if you drink more than one or two alcoholic drinks per day.

TOOOTH LOSS/MOUTH PAIN

A healthy mouth, teeth and gums are needed to eat. Missing, loose or rotten teeth or dentures which don't fit well or cause mouth sores make it hard to eat. In a 1992 survey 43% of older adults aged over 70 stated that they had eating problems caused by ill fitting dentures and missing teeth.

ECONOMIC HARDSHIP

About three quarters of people over 65 are dependant on pensions and of these two thirds are full pensioners. A single pensioner earns \$8221 per year which is only a quarter of average weekly earnings and marginally above the poverty line. On such a low income, it is hard to buy the food you need to stay healthy.

REDUCED SOCIAL CONTACT

Over one third of all older people live alone. While it is recognised that you may have social reasons for eating alone, being with people daily has a positive effect on morale, well-being and eating.

MULTIPLE MEDICINES

Many older Australians must take medicines for health problems. Almost one third of older Australians take 3 or more daily. Growing old may change the way we respond to drugs. The more medicines you take, the greater the chance for side effects such as increased or decreased appetite, change in taste, constipation, weakness, drowsiness, diarrhoea, nausea, and others. Vitamins or minerals when taken in large doses act like drugs and can cause harm. Alert your doctor to everything you take.

INVOLUNTARY WEIGHT LOSS/GAIN

Losing or gaining a lot of weight when you are not trying to do so is an important warning sign that must not be ignored. Being overweight or underweight also increases your chance of poor health.

NEEDS ASSISTANCE IN SELF CARE

Although most older people are able to eat, one in ten over 65 have trouble walking, shopping, buying and cooking food, especially as they get older.

ELDER YEARS ABOVE AGE 80

Most older people lead full and productive lives. But as age increases, risk of frailty and health problems increase. Checking your nutritional health regularly makes good sense.

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Appendix G

Suggested improvements and changes that were incorporated (re the overall quiz based on evaluation survey):

- Score is out of 46 not 48 – **corrected and other scores adjusted**
- Q 16-18 score line misaligned – **corrected**
- Q2 –re incidental activities queried – housework, gardening, walking the dog, going to the supermarket - **have included heavy housework**
- Q3 make it clearer that you can tick more than one options – **bolded scoring (total score out of 4 points).**
- Though some people liked the sub total being carried over, for a few participants there was some confusion about whether it was the page total or progressive total. Add line for both sub totals and totals– **added “progressive sub total” to the bottom page and line added for subscores.**
- A few people had difficulty with the BMI calculations and a number of suggestions were made. This includes, **explaining 160 cm is equal to 1.6 metres and adding further details about how to use the table.**
- Q10 – one person was unsure whether to score each individual boxes (related to particular food groups) and a few others found the scoring confusing. [Although one person commented on the fact that some food groups include daily consumption and others refer to weekly consumption, this is how the guidelines are currently worded.] **Instructions re scoring has been bolded for further clarity.**
- Q9 – waist circumference – what if you are 90 and 102 and make it clear men and women complete their respective section – **reworded: 90cm and over/ 102cm and over; bolded For men and For Women (and added “For”).**
- Q13 – Many advised that they saw a doctor more than 3 times for preventive reasons not illness, or that the visits are important to ensure chronic conditions are well maintained – **reworded to ensure annual check up is undertaken**
- Q17 add Probus as an example – **done**
- Typo on face sheet “a” family member, 4th line from bottom - **corrected**
- Q14- you do not suggest an amount of time for “good nights sleep”. –**added “generally 8 hours” to actions section.**

Suggestions not incorporated/to be considered in future work

- Q12 – (chronic illnesses) – suggest separating mental and physical health
- Including question re being a carer.
- Including a question re pet ownership.
- Page 6 at end of quiz have a sub total and total score.
- Q21 –23 simplistic and condescending – optimism or lack of – is part of one’s personality.
- Re q12 – add additional question – “Do your chronic conditions adversely affect your quality of life?”
- Include section to list if disability is present and results weighted to take this into consideration

- Maybe a question re preventive measures taken throughout life, eg chiro, podiatry to augment medical procedures.
- Wondered how relevant it could be to ask distance to nearest services provision?
- A few people also felt that for an older person a waist of 80cm was too slim
- Did not elicit physical activity well (incidental activity);
- Did not elicit activity (physical) very well and diet poorly covered
- Generally felt rewarded by my score. However if I was getting consistently lower scores I would feel a bit hopeless and guilty. I think the actions to help you age well are generally worded in an encouraging way but wonder if phrases like “If you can... then you will feel better when ..” or “It may help you to ... if you can try to...might help even more. Overall a good initiative to keep us around longer.
- Chronic conditions (like cancer) difficult to answer – does this mean cured/remission et?
- Some suggested options did not adequately cover their circumstances and that comments areas were needed.
- Don't agree that you have to do work 5 days a week – Q16.
- “Inclusion of “very high risk” on P3 meaningless without referring to P8 – premature really and inconsistent with rest of quiz which makes no judgement until P6.
- No mention of memory which is concern for many; Dementia one of my worries does this cover this effectively?
- What would you call walking in distance (Q3)
- Is it worth asking about dental care?
- Does contact include email and internet?
- Suggest a question re attitude to one's own health, Eg I am a victim, I work with my health provider(s) to get the best state of health I can.

Comments and suggestions for the Actions to help you age well

- Does not address being underweight. Need to distinguish between those who are underweight as a result of illness and those of us who have always been tall and slim!
- By the time you are in your mid eighties you either have aged well or you have not. At least for those who can still complete the test.
- Recommend U3A, Probus Clubs, CAE, possibly COTA
- Q21-23 comments are a bit glib for anyone with problems in that area
- Dental care, podiatry and incontinence should be included
- Advice re weight is simplistic and ineffective; suggest replacing meal with diet
- Include questions re spouse/partner involvement
- How do you reduce waist to 80cm,
- Query re use of BMI (validity in question) and whether we've incorporated the new diet pyramid. [Note: most likely out in 2010/2011]
- Larger type and spread needed for those with low vision.
- People without internet unable to access websites (check is contact for all)
- Recommend establishing a working relationship with GP