

REPORT

Arthritis Relief Plus Ltd 4JOINTZ Post Market Survey Auckland, New Zealand

Conducted September 2009 - February 2010

1. Project Background and Brief

Joint soreness and lack of flexibility / mobility is a widespread issue affecting millions of people worldwide. The effectiveness of a treatment supporting healthy joints depends on its ability to reduce symptoms such as soreness, as well as to improve the joint movement leading to increased mobility. Furthermore, the effectiveness of a topical treatment for joint symptoms depends also on the transcutaneous absorption of the active ingredient and its penetration in sufficient quantities into underlying tissues of the joints.

2. Project Aim

ASN conducted an open label survey to assess the effectiveness of 4JOINTZ on the symptoms of joint stiffness and soreness in a group of men and women in New Zealand over a 3-month period.

3. Methodology

Recruitment

The survey was open to participants who had problems with at least one of the following joints: hands and fingers, feet, ankle, neck and shoulders. Participants were recruited via advertisements in public media in Auckland, NZ. The participants were initially screened by email for suitability for inclusion in the survey and 25 people were invited to an information session in Auckland. After the information session, 20 people agreed to participate in the survey and a total of 18 have completed the product trial.

Procedure

At the initial interview the participants completed consent forms, filled out appropriate background information (including lifestyle, current medications and medical history) and questionnaires. Participants were required to attend interviews again at 6 weeks and 11 weeks where the joints were re-assessed for soreness, mobility and flexibility. Participants were all invited to record a short video describing their experiences using the 4JOINTZ product.

Outcome measures

The primary outcome measures were a daily self-assessment of:

- 1. Soreness,
- 2. Mobility, and
- 3. Flexibility.

These were rated on a 0-10 scale where 0 was no difficulty with movement/flexibility or no soreness and 10 was severe difficulty with mobility/flexibility and severe soreness.

The other outcome measures included:

- 4. Knee injury and Osteoarthritis Outcome Score (KOOS) where appropriate
- 5. Quality of life assessment
- 6.General product feedback
- 7. Video interviews

4. Results

Demographics

Of the 20 people enrolled in the study, 18 completed the survey (12 women and 6 men). The average age of the participants was 63 years (range 49-80). The withdrawals (both men) were due to local adverse reactions to the product.

A range of joints was treated as shown in Table 1. Although many participants had multiple joints affected were asked to choose only one to be trialed for the purposes of this survey.

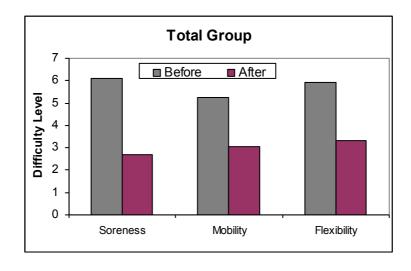
Table 1: Joints treated with 4JOINTZ.

	Men	Women	Total
Affected Joint			
Knee Joint	4	4	8
Hand	3	3	6
Neck	0	3	3
Feet / Ankle	0	1	1
TOTAL	6	12	18

Results

The average scores for Soreness, Mobility and Flexibility ratings at baseline and after 11 weeks are shown in Figure 1.

Figure 1: Total group average soreness, mobility and flexibility scores before and after treatment with 4JOINTZ.



The results for the sub-groups of joints are shown in Figure 2, 3 and 4.

Figure 2: Knee Sub-group average soreness, mobility and flexibility scores before and after treatment with 4JOINTZ.

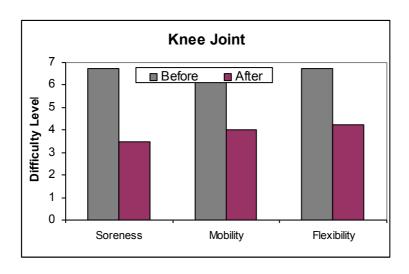
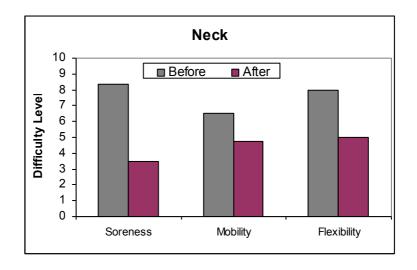


Figure 3: Hand Sub-group average soreness, mobility and flexibility scores before and after treatment with 4JOINTZ.



Figure 4: Neck Sub-group average soreness, mobility and flexibility scores before and after treatment with 4JOINTZ.



Reduction in Soreness, Mobility and Flexibility

The percent reduction / improvement in symptoms of OA were also calculated. Table 2 shows the average % reduction in soreness for all participants as well as in each sub-group (joint) at the end of the treatment.

Table 2: Percent change (reduction) in Soreness, Mobility and Flexibility rating

Sub-Group	Soreness Score			
	% Reduction			
Knee Joint	48			
Hand	71			
Neck	58			
Feet / Ankle	57			
Total	56			

Improvement in mobility and flexibility were also assessed. An increase in movement was found in all joints with significant improvement in flexibility shown in the hand (68.2% improvement) joint.

5.0 Post Survey Follow-up

Participants were followed-up approximately 2 months after the conclusion of the survey and were asked for their feedback. All participants (100%) indicated that they were happy with the results, would continue using the product on other affected joints and would recommend the product to family and friends.

6.0. Conclusions

The results show that the daily topical application of the 4JOINTZ over the 11 week period reduced joint soreness and increased mobility and flexibility in all joints treated.

The product appears to be reducing the inflammation and the swelling initially, and as a result of this, subsequently reduced the soreness in the joint.

The most significant improvement occurred in the hands and knees. The participants treating the smaller joints, specifically the hands reported major improvement by 6 weeks of use. This may be due to a number of factors such as size of joint, ease of access to the joint, as well as the degree of use and rest given to the joint during the treatment period.

Overall, these results indicate that the topical application of 4JOINTZ product exerted a positive physiological effect in reducing joint soreness and increasing flexibility and mobility.

Applied Science and Nutrition Pty Ltd have prepared this report for the Sponsor, ARP Pty Ltd.

Data Checked: Amanda Rao

Date: 28th February 2010

Report Approved: Dr Date: 28th February 2010 Dr Elizabeth Steels

Appendix 1Scores for individual participants

Participant	Age	Joint	Soreness baseline	Soreness End	Mobility Baseline	Mobility End	Flexibility Baseline	Flexibility End	Skin Reaction
1	49	Hand	5	2	4	2	4	2	No
2	57	Hand	7	1	6	1	6	1	No
3	80	Hand	4	2	3	2	4	2	No
4	71	Hand	4	1	5	1	5	1	No
5	77	Hand	4	1	3	1	3	1	No
6	73	Knee	7	6			9	5	No
7	52	Knee	6	3	8	7	8	6	Yes
8	57	Knee	9	5	7	3	6	6	No
9	55	Knee	5	1	5	4	5	3	No
10	68	Knee	8	2	5	2	5	2	Yes
11	55	Knee	4	2	5	3	6	4	No
12	70	Knee	9	5	7	5	9	5	Yes
13	59	Knee	6	4	6	4	6	3	No
14	72	Neck	10	3			8	2	No
15	69	Neck	8	4	8	5	8	6	No
16	50	Neck	7	3.5	5	4.5	8	7	No
47	50	Too	2	4	2	2			Na
17	56	Toe	3	1	3	2	3	2	No
18	67	Foot	4	2	4	2	4	2	No