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knee injury is warranted to determine nutritional targets for optimizing knee tissue recovery and preventing or delaying the onset of OA.

Figure 1: Proportion of Participants Meeting, Not Meeting or Substantially Not Meeting Dietary Guidelines
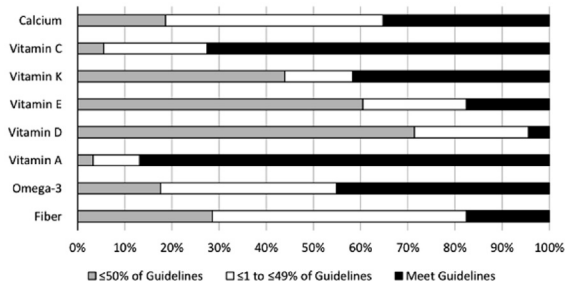
Table 3.
Participants Not Meeting Recommended Dietary Guidelines by Study Group

Dietary Guideline	Uninjured (n=39)	Injured (n=52)	Odds Ratio (95% CI), p-value
Protein RDA (g/kg)	3 (7.7)	4 (7.7)	1.00 (0.21, 4.75), p=1.00
Protein AMDR (%)	0 (0)	0 (0)	-
Carbohydrates RDA (g)	0 (0)	0 (0)	-
Carbohydrates AMDR (%)	8 (20.5)	11 (21.2)	0.96 (0.35, 2.68), p=0.94
Fat AMDR (%)	25 (64.1)	23 (44.2)	2.25 (0.96, 5.28), p=0.006
Fiber AI (g)	34 (87.2)	44 (84.6)	1.24 (0.37, 4.12), p=0.73
Omega-3 AI (g)	17 (43.6)	33 (63.5)	0.44 (0.19, 1.04), p=0.06
Vitamin A EAR (IU)	3 (7.7)	10 (19.2)	0.35 (0.09, 1.37), p=0.13
Vitamin D EAR (IU)	38 (97.4)	51 (98.1)	0.75 (0.05, 12.30), p=0.84
Vitamin E EAR (mg)	34 (87.2)	42 (80.8)	1.62 (0.51, 5.19), p=0.42
Vitamin K AI (µg)	24 (61.5)	33 (63.5)	0.92 (0.39, 2.17), p=0.85
Vitamin C EAR (mg)	8 (20.5)	16 (30.8)	0.58 (0.22, 1.54), p=0.28
Calcium EAR (mg)	25 (64.1)	40 (76.9)	0.54 (0.21, 1.34), p=0.18

Values represent count (% not meeting dietary guideline). AI=adequate intake, AMDR=acceptable macronutrient distribution range, EAR=estimated average requirement, g=grams, IU=international units, kg=kilograms, mg=milligrams, n=number of participants, RDA=recommended dietary allowance, µg=micrograms

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PATIENTS' PERSPECTIVES ON FLARES IN KNEE OSTEOARTHRITIS: A QUALITATIVE STUDY

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Purpose: Acute flares in osteoarthritis may be an important, although poorly understood part of its natural history. Despite an OMERACT working group recently proposing a preliminary definition of acute flare in OA there is still uncertainty around whether these events are part of a spectrum of symptom variability or are distinct entities, and how active patients are in managing flares and understanding their predictability.

The purpose of this study was to explore flares in knee OA from the patients' perspective, using qualitative methods, with a particular focus on self-management and help-seeking.

Methods: Ethics approvals obtained. Semi-structured interviews were conducted with 15 participants from two general practices in the United Kingdom by a GP researcher (EP). The participants were aged 45 years and over, with a Read-coded consultation in their general practice record, for knee OA/arthralgia in the previous 2 years. Eligible participants reported experiencing at least one flare in the previous 12 months. Purposive sampling was used to ensure an even distribution of gender and range of ages. During the interview participants were invited to draw a diagram of their pain experience over the previous 6 months to aid discussion. The interviews were digitally recorded and transcribed verbatim. Analysis began as interviews were transcribed, and the process of data generation and analysis was iterative. A constant comparison method was used comparing data and themes across interviews. Data generation continued until data saturation was achieved. Coding was undertaken by EP, LD and CC-G. Regular team discussions led to an agreed coding framework.

Results: Four over-arching themes were identified: *Experiencing pain: identifying flares* Participants described flares in terms of: an increase in pain intensity, change in pain quality (using descriptors such as 'sharp'), speed of onset (generally sudden), duration, and impact on valued activities. Two different types of flares were described: severe, infrequent episodes with a longer duration, that had greater impact, could be unpredictable, which participants were fearful of, and were more likely to refer to as flares. This contrasted to 'minor' episodes that were described as shorter, more frequent, had minimal impact and tended to be associated with everyday activity e.g. walking or climbing stairs. *Impact of flares* Impact on every day, recreational and social activities was more important than pain intensity and duration, and led to feelings of frustration. Flares could result in loss of confidence, dependence on others to participate in activities (for example, going shopping) and vulnerability. The more severe episodes had a greater impact on valued roles than minor episodes. When referring to minor episodes, participants described the need to be stoical and "carry on". *Response to flares* Participants described self-management strategies such as: using oils, rubbing their knee joint, use of mobility aids, resting and taking medication available to them at home. Help-seeking behaviours were guided by impact on sleep, reaching emotional limitations, exhausting self-management options and a pain experience worse than normal. Who they sought help from was guided by previous experience and who they could access more easily. *Predicting and avoiding flares* Unpredictable flares were distressing and had greater impact such as having to cancel planned activities. Where flares could be predicted the participant could plan ahead, e.g. they rested the day before a planned outing. However, several participants described the guilt they felt after perceiving to have 'overdone' things. Participants reported avoiding or adapting activities, such as climbing stairs to prevent flares, sometimes resentfully.

Conclusions: Participants described flares as a worsening of symptoms that were sudden in onset, sustained and impacted on valued activities. Impact led to feelings of fear, vulnerability, loss of confidence and resentment. The components of the patient descriptions share similarities with developing concepts and definitions of OA flares, for example that proposed by the 'Flares in OA' OMERACT group. Whether the 'minor' episodes of pain actually represent daily variability of pain and are separate to or on a spectrum with the more 'severe' episodes of pains (commonly referred to as 'flares' by the participants) is still up for debate. Differentiating between them may be important in the research setting in order to gain more accurate estimates on frequency, associated risk factors and triggers. In the clinical setting, differentiating between these phenomena may help guide patient education, identification (of the pain episodes that are more important to patients') and self-management.

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DAILY WALKING VOLUME AND INTENSITY AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION: A PRELIMINARY ANALYSIS

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