



## 移植后的营养 选择最好的饮食



移植后、您需要特别注意营养。此小册为您解说下列有关事项：

- 手术后即时的营养需求
- 食物的安全
- 药物如何影响您营养方面的需求
- 您在营养方面长期的需求

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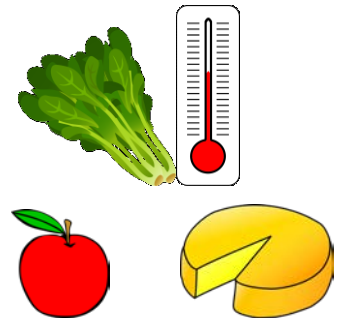
## 第一章

# 移植手术后即时的营养需求

### 食物安全的重点

您所服用的免疫抑制药物亦会增加您被感染的风险。食品安全对于帮助预防感染及食源性疾病是非常重要的。

- **避免吃生的蛋、肉家禽、或鱼。** 使用烹饪肉类用的温度计、煮至内部温度达到本页图表中列出的温度。
- **洗净所有的生果及蔬菜。** 在吃、切或去皮之前先用水洗净。
- **避免未经高温消毒的产品。** 如苹果汁、生的果汁、奶酪要注意检查食物的包装上注明是经高温消毒的。



食物	内部温度或状态
牛肉、猪肉、小牛肉、羊肉（排骨肉、炖肉、肉排）	华氏 145° 度 熄火后最少等待 3 分钟
碎肉	华氏 160° 度
火腿	华氏 145° 度
家禽类（碎肉、部分、整只及填塞的）	华氏 165° 度
蛋	煮到蛋白、蛋黄都结硬了
蛋做的菜	华氏 160° 度
鱼	华氏 145° 度 或肉是煮到不透明的状态、用筷子很容易分开
虾、龙虾、螃蟹	煮到肉呈珍珠状和不透明状
蚌、蚝、青口贝	煮到壳打开
带子	煮到肉呈乳白色或不透明且结实
剩菜、沙锅	华氏 165° 度

如您没有烹饪用的温度计：

- 牛排煮到中度的熟度
- 碎肉、家禽类、及鱼类要煮熟
- 蛋要煮到蛋黄结硬了

## 其他的食物安全提示

在餐馆吃饭

- 移植后的前 3 个月、在外出吃饭时选择煮熟的蔬菜和水果。
- 不要在自助式餐厅或沙拉吧用餐。
- 选择热的三明治。所有预先切好片的肉类都必须加热。
- 避免寿司（生的或熟的）夏威夷式生鱼或柠檬腌的生鱼。
- 避免使用放在盘里的牙签或薄荷糖。
- 询问服务员食物是怎么预备的。

## 清洁

- 接触食物前、先用温水、肥皂洗手 20 秒钟。
- 每次用完餐后、以热肥皂水或漂白水洗净厨房的台面及餐具。
- 打开罐头前、先将罐头擦干净、每次使用后将开罐器洗净。

## 生的未经消毒的食物

- 避免自制的发酵食品如泡菜、韩国泡菜及酸奶。
- 避免生的益生菌饮料或克菲爾酸奶。
- 避免生豆芽或苜蓿芽。如果煮熟了就可以吃。
- 在清洗较难清洗的新鲜食物时、可先将它们浸泡在水中、然后用清水冲洗。这包括绿叶蔬菜、浆果和蘑菇。
- 事先已洗过的包装蔬菜如菠菜、或其他绿色蔬菜仍然需要在吃前再洗过。
- 冷冻的蔬菜及冻餐必须加热后才吃

## 食物的处理

- 避免用闻食物的气味来检查新鲜度。您可能吸入霉菌孢子
- 避免品尝生的或部分熟的肉类、家禽、鸡蛋、鱼或贝类。这包括蛋糕糊或含有生鸡蛋的面团。

- 避免直接吃包装好的午餐肉类或已煮好的熟肉类。但是您可以：
  - 用微波炉将午餐肉加热后才吃。
  - 在您要吃时、先将冷冻的午餐肉用微波炉解冻再做三明治。
- 不要在室温下腌浸及解冻食物、要放在冰箱里。
- 如您用微波炉解冻食品、在解冻后就需即刻烹煮。
- 丢弃有凸起、凹陷、有孔或漏了的罐头食品。
- 需使用不同的盘碗来放生的及熟的食物。
- 扔掉有裂纹缝的杯盘碗筷、锅盆、切菜板。他们很难彻底清洗干净。
- 每次使用后要将开罐器洗净。

### 冷藏及储存的提示

- 剩余的食物在做好后 **2** 小时内要放到冰箱内。
- 剩余的食物在 **3** 到 **4** 天后就要丢掉。
- **不要吃**那些在室温下已放了 **2** 小时以上的食物。包括野餐或烧烤时的肉类土豆沙拉、凉面或烧烤。
- 先将食物从锅内转放到盒子里再放冰箱。使用浅的盒子、食物可以凉得快些。
- 冰箱保持刚好在 华氏 **40°**度 (摄氏 **4.5°**度) 以下。
- 冷冻柜的温度保持在华氏 **0°F** (摄氏 **-18°C**)。

### 您对蛋白质及热量的需求

移植手术后摄取更多的蛋白质及热量是很重要的。丰富的营养有助于：

- 伤口的愈合
- 抵抗感染
- 维持体力

尤其对服用强的松的病人更加重要、因为强的松会导至肌肉消减。

瘦肉、鱼类、家禽类、蛋、牛奶、奶酪、优格、豆类、果仁、及种子都是含蛋白质丰富的食物。它们在一食份里、就含 **7** 公克的蛋白质。

### 紧接着移植后

- 您每天需要摄取 \_\_\_\_\_ 公克的蛋白质。
- 您每天需要摄取 \_\_\_\_\_ 的卡路里。

### 移植后 **8-12** 周

- 减少您每日蛋白质的摄取到\_\_\_\_\_公克。
- 您的营养师可能会根据您伤口愈合的状况、您的活动量、及促进长期维持健康的体重、来调整您需要的卡路里。

### 含高蛋白质的食物

蛋白质丰富的食物	一份的量	蛋白的含量 (公克)
煮熟的豆类:		
- 黑豆、鹰嘴豆、腰豆、菜豆	½ 量杯	7
- 扁豆、豌豆	½ 量杯	8
奶酪:		
- 低盐乡村奶酪	¼ 量杯	6
- 干酪 (切达干酪, 瑞士)	1 盎司	7
- 意大利乳清干酪	¼ 量杯	7
- 软奶酪 (山羊奶酪, 莫泽雷勒干酪)	1 盎司	5
- 莫扎里拉奶酪丝	1 盎司(1 条)	7
蛋	一个蛋、2 个蛋白或 1/4 杯量的鸡蛋代品	7
罐装鱼:		
- 鲭鱼、沙丁鱼	1 盎司	7
- 三文鱼、金枪鱼	1 盎司	7
熟的鱼:		
- 鱼片	3 盎司	21
- 三文鱼饼	3 盎司	21
煮熟的肉:		
- 鸡胸肉	3 盎司	21
- 瘦的碎肉	1 个肉饼、3 盎司	21
- 猪排	3 盎司	21
- 瘦牛排	3 盎司	21

蛋白质丰富的食物	一份的量	蛋白含量 (公克)
牛奶:		
- 全脂、2%、1%、脱脂、或豆浆	1 量杯	8
- 脱脂奶粉	¼量杯	10
- 全脂奶粉	¼量杯	7
果仁及种子:		
- 杏仁、花生、葵花子	1 盎司	6 至 7
- 腰果、蓖麻子 (磨碎) 核桃	1 盎司	4 至 5
- 果仁酱	2 大量匙	5 至 8
蛋白质饮料:		
- 博世特高蛋白、雀巢博世特 加强营养奶, 氨素高蛋白奶、安素加强奶	8 盎司	13 至 16
- Boost VHC, Nepro 健肾营养奶	8 盎司	19 至 22
- 康乃馨即食早餐冲 1 量杯牛奶	8 盎司	13
煮熟的藜麦	1 量杯	8
煮熟的海鲜:		
- 螃蟹	1 盎司	6
- 蒸带子	1 盎司	7
- 虾	1 盎司	6
豆豉	1 盎司	5
豆腐 (软、硬、特硬)	3 盎司	5 至 9
乳清蛋白粉 (蛋白质含量取决于品牌)	1 盎司	12 至 20
优格:		
- 希腊式	5.3 盎司	12 至 18
- 普通、原味	5.3 盎司	5 至 6

### 如何促进蛋白质的摄取

- 白天吃 5 至 6 小餐和点心、而不是 3 顿大餐。尽量包含：
  - 每餐包含 20 公克 以上的蛋白。
  - 每次吃点心包括 7 公克以上的蛋白质。
- 将普通优格改换为希腊式优格。因为希腊式优格所含的蛋白质比普通优格高两倍。

- 将肉丁、豆类、奶酪、果仁种子加在沙拉、汤及沙锅煲里。
- 预备些方便小吃、可以保留些现成的、含蛋白质丰富的食物、如水煮鸡蛋、奶酪条、单份包装的奶酪、无盐的果仁 and 山径混合零食。
- 将果仁酱或豆子蘸酱涂在土司、饼干或鲜果、蔬菜上。
- 把鲜果蔬菜加在意大利式奶酪或乡村奶酪内。或加在沙锅煲里。
- 吃饭或吃点心时加杯牛奶或蛋白质饮料。
- 在沙锅煲、汤、麦片里加蛋白粉或奶粉。
- 用希腊式优格、牛奶、蛋白粉、豆腐或其他高蛋白质食物来自制奶昔。
- 饮食中包括全谷类、如藜麦及高蛋白质的麦片和面包。

## 水分的需求

- 您的目标是每天最少喝\_\_\_\_\_公升的饮料。相当于\_\_\_\_\_量杯或\_\_\_\_\_盎司。
- 请资讯您的医生对您的饮水量是否有特殊的规定。
- 我们可能会要您记下您所喝饮料的量、以察看您所摄入的液体量。

## 如何达到您日常喝流质的目标

- 即使您不口渴也要喝。如果您感到口渴了、可能就是因为饮水不足。
- 以您自己的速度、整天慢慢地喝饮料。
- 在餐前餐后、吃零食前后喝少量的饮料。
- 设置一个计时器、每隔 1 到 2 小时就提醒自己喝水。
- 无论您走到那里、都随身携带一整瓶的水。
- 限制咖啡、茶和含咖啡因的汽水。
- **不要**喝能量饮料，如红牛（Red Bull）、怪物（Monster）、和摇滚明星（Rock Star）。
- 尽可能地选择健康的饮料、如水、牛奶、不加糖的茶、奶昔、低盐的蔬菜汁、加味的汽水、或营养补品



## 血糖及碳水化合物

您所服用的一些药物可以提高您的血糖（糖）水平。**食物中的碳水化合物也会提高您的血糖水平。**为了改善您的血糖控制、了解那些食物会提高血糖水平、吃正确的份量、并限制您饮食中的单糖。

含碳水化合物的食物	含少量或无碳水化合物的食物
水果及果汁	大多数的蔬菜
淀粉：谷类、豆类、及淀粉类的蔬菜	肉类、家禽类、鱼、奶酪、及代肉类。
牛奶及优格	脂肪（牛油、油）
甜品、零食类	

## 一食份碳水化合物的例子

### 水果

- ½ 香蕉
- 4 盎司的果汁
- 1 小份的水果

### 淀粉类

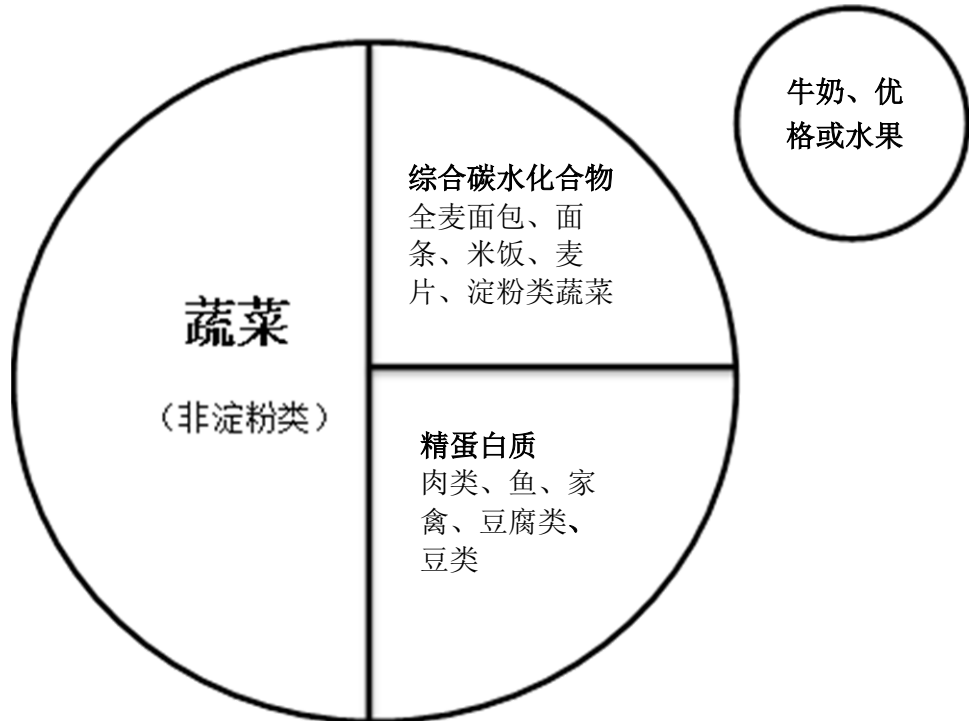
- 1/3 量杯的饭或面食
- 1 一片面包
- ½ 量杯的玉米、豆、或青豆
- ½ 量杯的热麦片
- 1 个小的墨西哥面饼

### 奶类

- 1 量杯牛奶
- 1 量杯“低脂”优格

## 健康餐饮的模式

利用下面的图片来计划您的餐食。每餐都要有蛋白质类的食物。每餐半份的量是**不含淀粉的蔬菜**（他们不含大量的碳水化合物、但提供良好的营养素）和纤维、它可以帮助您感觉饱足。



要限制或避免单糖类的食物如果汁、一般的汽水、糖、糖浆及糖果。这些食物会使血糖很快地升高、却没有太多的营养。

您每餐碳水化合物的目标：

- 妇女: 约 3 至 4 份量 (45-60 公克的碳水化合物)
- 男士: 约 4 至 5 份量 (60-75 公克的碳水化合物)

## 钾

矿物质钾使肌肉及神经运转良好。太多或太少的钾会影响您的心脏。

药物如环孢素及他克莫司、西罗莫司、可以导致您的血钾水平高于正常。您的医护人员可能要您在短期内限制您从饮食中摄入钾。一旦您的药物剂量稳定了、您的血钾水平应该就会正常。

含钾丰富的食物有许多健康益处。当您的血钾水平稳定后、您增加含钾丰富的食物是很重要的。

## 含钾丰富的食物

-杏子	-奶制品（牛奶、优格）	-营养奶 (Ensure, Glucerna)
-西蓟	-深绿色蔬菜（甘蓝菜、菠菜）	-桔子
-牛油果	-干果	-土豆、番薯
-香蕉	-蔬果汁	-西梅、西梅汁
-干豆（煮熟的）	-猕猴桃	-一些运动饮料
-甜菜及甜菜叶	-芒果	-番茄、番茄制品
-煮熟的西兰花	-甜瓜类（哈密瓜、蜜瓜）	-冬季的瓜类 (acorn、butternut、南瓜)
-布鲁塞尔豆芽	-油桃	
-椰子、椰奶汁、椰子水		

## 镁

镁对我们的身体很重要。它有助于维持肌肉、防止抽筋、有助于控制血压、血糖、并保持我们的心跳平稳。

他克莫司和环孢素可能会耗尽您的镁。大多数移植患者需要服用药物、来保持他们镁的水平在一个健康的范围内。如您每天吃含镁丰富的食物、可以减少您对药物需求的剂量。而且、富含镁的食物通常含有纤维、蛋白质及磷。

## 增加摄取镁的提示

- 以食物代替药。每天吃各种含镁丰富的食物。
- 如很难吞咽就将镁的药片压碎。压碎了可能有助于您体内的吸收。
- 有些人服用高剂量的镁时会腹泻。如果发生这种情况、请告诉您的医护人员。另一种不同形式的镁可能对您更合适。

## 含镁丰富的食物

-豆类及青豆	-水果如牛油果、干果	-蔬菜如洋蓟、马铃薯、玉米、菠菜、番茄
-巧克力及巧克力牛奶	香蕉	-全谷物如野生米或钢切燕麦
-咖啡	-果仁、果仁酱	
-鱼及其他海鲜	-藜麦	
	-豆浆	

## 磷

我们的身体利用磷来形成骨骼和牙齿、支持肾脏和肌肉的功能、保持我们的心跳正常、发送神经信号、并帮助我们处理养份。

如您血液里磷的水平偏低、那您的饮食里含高磷食品就很重要了。但如饮食不能提高血液水平、有时需要服用磷的补剂。

移植后体内磷的含磷量也可能稍微偏高。这仅是一个暂时的现象。它并不意味着您需要限制您的饮食中磷的摄取量。如移植后您需要遵循低磷饮食、您的医人员就会告诉您。

### 含磷丰富的食物

- 麦麸
- 奶制品
- 干的豆类
- 鱼
- 扁豆
- 肉类
- 猪肉
- 家禽
- 黄豆及黄豆制品
- 干豌豆

## 钙与骨骼的健康

服用强的松激素有一个长期的副作用就是骨骼及关节会变弱。为了避免骨质疏松（低骨量）及骨质疏松症（脆骨）、您必须每天服用足够的钙片、磷及维生素 D。即使您不服用强的松激素、钙对您的骨骼健康乃是很重要的。

您一定要在您日常饮食中包括几份含钙丰富的食物。如您不选择吃含钙丰富的食物、您可能就需要补充钙。

**含钙丰富的饮食**（这些食物中的钙含量可能会有所不同）。

食物	份量
煮或蒸的白菜	1 量杯
煮或蒸的西兰花	1 量杯
煮或蒸的各类深绿蔬菜	1 量杯
煮或蒸的羽衣甘蓝	1 量杯
牛奶	1 量杯
优格	1 量杯
奶酪	1 盎司
加钙橙汁	1 量杯
三文鱼	3 盎司
加钙豆浆或杏仁露	1 量杯
老豆腐（钙制的）	½ 量杯
芝麻	2 大汤匙

## 第二章

# 长期的调整及营养的注意事项

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约在移植手术 2 个月后、就当开始专注于您的长期目标：

- 吃得健康
- **低钠的食物**—有助于降压的饮食。
- **钙及维生素 D**—有助于骨骼的健壮。
- **健康的心脏**—选择健康的脂肪及高纤维的食物来控制血脂及三甘油。
- **控制体重**—健康的体重有利于您整体的健康。

## 吃得健康

- 选择各种各样多色彩的食物吃出一个均衡的饮食。每次进食包括水果和 蔬菜、以增加您营养及纤维的摄入量。
- 参照健康的饮食模式（见第 9 页）。您盘子 **1/2** 放蔬菜、**1/4** 放蛋白质的食物。**1/4** 放碳水化合物的食物。
- 选择瘦的蛋白质食物、如鸡肉、鱼、猪肉、豆类、坚果或豆腐。
- 关于碳水化合物；选择全麦的食品、如糙米和全麦面食。全麦纤维含量较高、可降低胆固醇、控制血糖。
- 以水果做点心。
- 一定要包括脱脂或低脂的乳制品来补钙。

## 低钠盐的食物

低钠盐（低盐）饮食对每个人都是健康的。为了控制的您血压、别再用撒盐瓶、并选择低钠的食品。

钠是很难对付的！盐增加了食品的保质期、所以包装和制备好的食品通常含有大量的盐。阅读“营养含量”标签是非常重要的，这样您就知道吃进了多少钠。

## 减钠盐的小提示

我们建议您每天摄取 2000 毫克的钠。下面是协助您减少钠的提示：

- 烹调时或餐桌上**不要**再加盐。
- 在家做菜时选用新鲜的材料及肉类。这样就可控制钠的含量。
- 用香料、香菜、柠檬汁和醋来做调料代替盐。

- 选择标注明不加盐、无添加盐或无盐的产品。
- 限制吃快餐及包装好的食品。
- 寻找一些低钠盐食谱或食谱博客的食谱和建议。
- 阅读“营养含量”标签、找出包装食品的钠含量（参见第 16 页的实例）：
  - 对于主餐、请避免每食份含钠 600 毫克以上的食物。
  - 对于配菜或小菜、请避免每食份含钠 150 毫克以上的食物。

### 阅读营养含量标签

“营养含量”标签在 2016 年更新。当您阅读标签时、注意分量的大小、总碳水化合物、蛋白质和钾的含量。

<b>Nutrition Facts</b>	<b>营养成分</b>
8 servings per container	每罐有 8 食分
<b>Serving size 2/3 cup (55g)</b>	<b>每食分 2/3 量杯 (55 公克)</b>
<b>Amount per serving</b>	<b>每食分的量</b>
<b>Calories 230</b>	<b>卡路里 230</b>
<b>% Daily Value*</b>	<b>每日需要量的%</b>
<b>Total Fat</b> 8g <b>10%</b>	<b>总脂肪</b> 8 公克 <b>10%</b>
Saturated Fat 1g <b>5%</b>	饱和脂肪 1 公克 <b>5%</b>
Trans Fat 0g	反式脂肪 0 公克
<b>Cholesterol</b> 0mg <b>0%</b>	<b>胆固醇</b> 0 毫克 <b>0%</b>
<b>Sodium</b> 160mg <b>7%</b>	<b>钠</b> 160 毫克 <b>7%</b>
<b>Total Carbohydrate</b> 37g <b>13%</b>	<b>总碳水化合物</b> 37 公克 <b>13%</b>
Dietary Fiber 4g <b>14%</b>	纤维 4 公克 <b>14%</b>
Total Sugars 12g	总糖量 12 公克
Includes 10g Added Sugars <b>20%</b>	包括 10 克加添糖 <b>20%</b>
<b>Protein</b> 3g	<b>蛋白质</b> 3 公克
Vitamin D 2mcg <b>10%</b>	维生素 D2 维毫克 <b>10%</b>
Calcium 260mg <b>20%</b>	钙 260 毫克 <b>20%</b>
Iron 8mg <b>45%</b>	铁 8 毫克 <b>45%</b>
Potassium 235mg <b>6%</b>	钾 235 毫克 <b>6%</b>
<small>* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small>	<small>*每日所需的% 质是标明每食份为您提供每日营养所需的百分比。是按每日消耗 2000 卡路里来计算营养的所需。</small>

## 钙及维生素 D

钙和维生素 D 有助于维持您骨骼的健壮。但是长期使用强的松会增加您患骨质疏松、骨折和关节无力的风险。即使您不服用强的松、也要确保您得到足够的钙、以保持您有健康的骨骼。

这些食物含丰富的钙、维生素 D 和磷。它们中大多数也是蛋白质的良好来源：

- 1 杯奶 (牛奶、豆浆、及杏仁露 加钙及维生素 D)
- 1 杯优格或 1/2 杯希腊式优格
- 1 盎司奶酪
- 1/2 杯乡村奶酪
- 3/4 通心粉和奶酪
- 3 盎司豆腐 (以钙制作的豆腐)
- 3 盎司罐装带鱼骨的三文鱼

每天尽量摄取 4 食量份的低脂、含钙丰富的食物。它们也会增加蛋白质的摄取量。

如果您不吃高钙的食物、您就需要补充钙。与您的医生或营养师讨论、什么类型的补剂是最好的。

## 心脏的健康

长期服用他克莫司 (tacrolimus) 可能会导致您体内胆固醇及甘油三酯升高。这会提高您患心脏疾病的风险。

保持一个有益心脏健康的生活习惯可预防患心脏疾病。如何保持心脏的健康：

### 运动

一周至少运动 5 天，每次至少 30 至 60 分钟。维护心脏健康的运动有：

- 有氧运动
- 做家务
- 游泳
- 骑脚踏车
- 慢跑
- 步行
- 园艺
- 重力训练
- 瑜伽

### 每周运动目标

我会：

- 每周 \_\_\_\_\_、\_\_\_\_\_ 天、每次 \_\_\_\_\_ 分钟
- 每周 \_\_\_\_\_、\_\_\_\_\_ 天、每次 \_\_\_\_\_ 分钟

### 选择有益心脏健康的食物

- **增加每日纤维摄取量到 25 至 35 公克。**纤维会与脂肪及胆固醇结合、可避免您摄取过量。豆类、全麦、水果及蔬菜都是含有纤维的食物。
- **多摄取有益心脏健康的脂肪。**不饱和脂肪及 **Omega-3** 脂肪酸可以降低胆固醇和甘油三酯：
  - 牛油果、橄榄油、菜籽油、亚麻籽粉、奇亞籽、大麻种子 及核桃都富含有益心脏健康的脂肪。
  - 每周摄取 **2-3** 份的鱼肉。三文鱼、金枪鱼、鲑鱼都富含有益心脏健康的脂肪。
- **限制您饱和脂肪的摄取量：**
  - 选择低脂或脱脂的乳制品。
  - 限制红肉的摄取量至每周 **2** 次。当您摄取红肉时，尽量选择瘦肉或腿肉。
  - 限制摄取油炸的食物及牛油。
- **限制您钠的摄取量**（请参阅第 13 页内的“低纳盐的食物”）
- **请咨询您的医师是否可以饮酒。**

## 控制体重

维持健康的体重对于移植前、后都十分重要。维持健康的体重可以：

- 减低患糖尿病的风险
- 改善血压
- 改善血糖控制效率（若您患有糖尿病）
- 舒缓关节及背部疼痛
- 增加体能

当您接受移植后、您可能因为健康情况有改善或因为饮食限制也减少了、所以您会增加食欲。

服用强的松这类的药物可能使您胃口更好。这又可能导致饮食过度和体重增加。

## 控制体重的小提示

- 在接受移植后的日常生活中安排好定时做运动。做运动可以协助控制体重和增长肌肉。
- 用比以往小的碗或盘子装食物。如此可提醒您是否有过度进食。
- 每天吃 **3** 小餐和一份点心。



- 当您吃完一份食物时、等至少 **20** 分钟后再摄取第二份。因为您的身体往往会在进食后过一段时间才会感到饱足。
- 限制摄取糖份及甜食。摄取甜食会使您感到更加疲倦并使您在两餐间感到饥饿。
- 两餐间隔可咀嚼口香糖来取代进食。
- 尝试一下低卡路里、低脂肪的点心：
  - 烤薯片搭配莎莎酱
  - 新鲜水果
  - 低脂优格
  - 原味爆米花
  - 新鲜蔬菜和低卡路里沾酱
  - 无糖冰棒

我的理想健康体重目标是 \_\_\_\_\_。

## 加入移植队！(Team Transplant!)

移植队 (Team Transplant) 是一个为移植捐献者及接受者提供资助的机构。主要活动包括跑步及走路。该机构成员包括接受移植器官者、器官植捐献者、医疗人员及亲友。机构的宗旨是提创成员们重视器官移植后的健康、体能和重生的机会。

自 2001 年开创以来、移植队 (Team Transplant) 致力于提倡捐献器官的重要性、及巩固已经接受移植、或日后需要接受移植的病患的健康。我们“绿健”团队透过步行、慢跑、半程马拉松及其他比赛来吸引大众关注器官捐献及其益处等议题。



我为何要加入移植队？

- 您会体验到很多乐趣!
- 训练过程将协助您加强体能及能量。
- 您会在一个安全、友善及具有互助的环境中和您的专属教练一起训练。
- 您会发现身为移植队的一分子-不管您是否参加任何竞赛-不但会感到非常有意义、而且有自我鼓励的价值。

当您加入移植队、不单您的健康能受惠、您或可成为健康的代表。欲知详情，请电邮 [teamt@u.washington.edu](mailto:teamt@u.washington.edu) 或上网：

[www.uwmcteamtransplant.com](http://www.uwmcteamtransplant.com).

**活得灿烂！活出自我！**

### 表格：移植药物如何影响您的营养

作用	起因	如何舒缓症状
腹泻	抗生素或抗病毒药物 <b>Cyclosporine</b> <b>Magnesium supplements</b> <b>Mycophenolate</b> <b>Tacrolimus</b>	- 避免用餐时、或在餐前或餐后 30 分钟内喝饮料 - 多摄取含有水溶性膳食纤维的食物例如苹果泥、香蕉或麦片
水分滞留	<b>Prednisone</b> 强的松	- 限制摄取含有钠盐的食物 - 请参阅第 15 页内的“低钠盐的食物”
伤口愈合缓慢	<b>Prednisone</b> <b>Sirolimus</b>	- 摄取足够的卡路里及蛋白质。 - 与您的医护人员讨论关于补品的问题
钾浓度过高	<b>Tacrolimus</b> <b>Cyclosporine</b>	- 限制摄取含有钾的食物 - 请参阅第 10 页内的‘钾’的资讯
镁浓度过低	<b>Tacrolimus</b> <b>Cyclosporine</b>	- 您的医护人员可能会开补剂给您 - 可透过所建议的饮食来补充 - 请参阅第 9 页内的‘钾’的资讯
磷浓度过低	<b>Tacrolimus</b>	- 您的医护人员可能会开补剂给您 - 可透过所建议的饮食来补充 - 请参阅第 10 页内的‘磷’的资讯
高血糖	<b>Cyclosporine</b> <b>Prednisone</b> <b>Sirolimus</b> <b>Tacrolimus</b>	- 限制摄取富含糖的食物，例如甜点、糖果、果冻、汽水和果汁。 - 控制摄取量 - 适当的运动 - 请参阅第 7 页内的‘血糖及碳水化合物’的资讯

作用	起因	如何舒缓症状
高血压	Cyclosporine Tacrolimus	<ul style="list-style-type: none"> <li>- 限制钠盐及太咸的食物</li> <li>- 请参看第 22 页“低盐的饮食”一节</li> </ul>
贫血	Cyclosporine Mycophenolate Prednisone Tacrolimus	<ul style="list-style-type: none"> <li>- 您的医护人员可能会开补铁剂或富含铁的食物给您</li> <li>- 在您摄取含铁丰富食物的同时、也多摄取含维生素 C 丰富的食物以协助吸收铁</li> <li>- <b>避免</b>在吃高钙食物的同时吃补铁剂</li> </ul>
药物的问题	Cyclosporine Sirolimus Tacrolimus	<ul style="list-style-type: none"> <li>- 避免吃葡萄柚、葡萄柚汁、石榴、石榴汁、文旦和杨桃</li> </ul>
高胆固醇及甘油三酯	Cyclosporine Prednisone Sirolimus Tacrolimus	<ul style="list-style-type: none"> <li>- 限制摄取含丰富饱和及反式脂肪的食物</li> <li>- 多摄取有益健康的脂肪；例如橄榄油、菜籽油、坚果或三文鱼</li> <li>- 限制摄取含糖量太高的食物，例如甜点、糖果、果冻、汽水和果汁</li> <li>- 控制摄取量</li> <li>- 适当的运动</li> <li>- 请参阅第 17 页内的‘心脏的健康’的资讯</li> </ul>
食欲及体重增加	Prednisone	<ul style="list-style-type: none"> <li>- 适当运动</li> <li>- 控制摄取量</li> <li>- 限制摄取含卡路里高的食物</li> <li>- 多摄取含高纤维的食物</li> <li>- 限制摄取富含糖分的饮料</li> <li>- 请参阅第 18 页内的‘控制体重’的资讯</li> </ul>
肌肉量减低	Prednisone	<ul style="list-style-type: none"> <li>- 多吃含蛋白质丰富的食物</li> <li>- 适当的运动</li> </ul>
钙摄取量不足及低骨密度	Prednisone	<ul style="list-style-type: none"> <li>- 每日摄取适量的奶制品</li> <li>- 您的医护人员可能会开补钙剂或维生素 D 给您</li> <li>- 请参阅第 11 页内的‘含钙丰富的饮食’的资讯</li> </ul>

## 备注

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### 您有任何疑问吗？

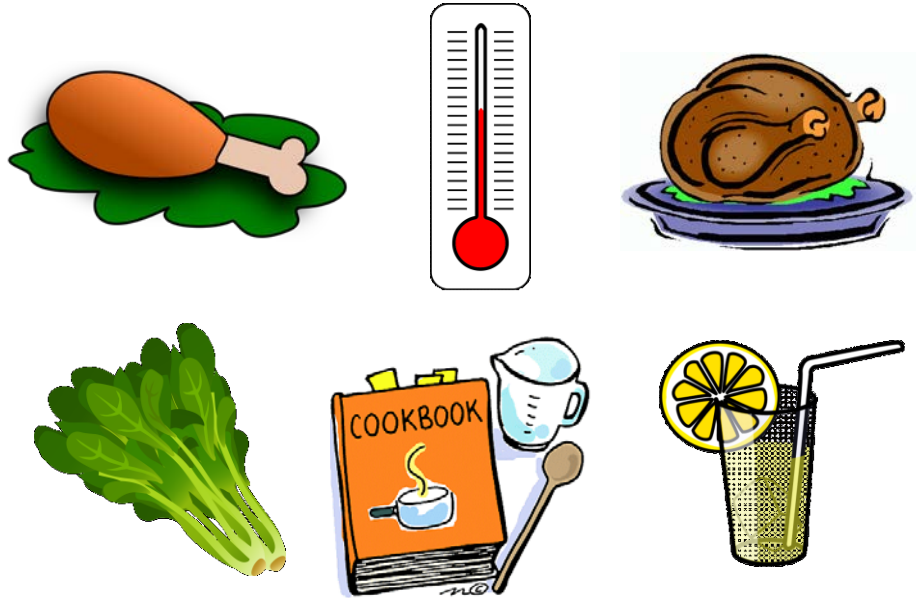
我们非常重视您的疑问。若您有任何疑问或顾虑，请您与您的营养师洽谈。

营养师: \_\_\_\_\_

电话号码: \_\_\_\_\_

## Nutrition After Your Transplant

*Making the best food choices*



After a transplant, you will have special nutritional needs. This booklet explains:

- Your nutritional needs right after surgery
- Food safety
- How medicines affect your nutritional needs
- Your long-term nutritional needs

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## Nutrition Care Right After Transplant

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### Part 2

## Long-Term Changes and Nutrition Care

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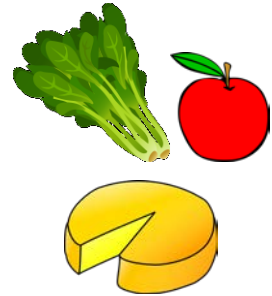
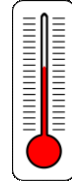
## Part 1

# Nutrition Care Right After Transplant

## Your Food Safety Essentials

Your immunosuppressant medicines increase your risk of infections. Food safety is very important to help prevent infections and foodborne illnesses.

- **Avoid eating raw eggs, meat, poultry, or fish.** Use a meat thermometer and cook to internal temperatures or state listed in the chart on page 4.
- **Wash all raw fruits and vegetables** with water before eating, cutting or peeling.
- **Avoid unpasteurized products.** Check packages of foods such as apple cider, raw juices, and cheese for the word *pasteurized*.



Food	Internal Temperature or State
<b>Beef, pork, veal, lamb</b> (chops, roasts, steaks)	145° F Let rest for 3 minutes after removing from heat
<b>Ground meat</b>	160° F
<b>Ham</b>	145° F
<b>Poultry</b> (ground, parts, whole and stuffing)	165° F
<b>Eggs</b>	Cook until yolk and white are firm
<b>Egg dishes</b>	160° F
<b>Fin fish</b>	145° F or flesh is opaque and separates easily with fork
<b>Shrimp, lobster, crabs</b>	Cook until flesh is pearly and opaque
<b>Clams, oysters, mussels</b>	Cook until shells open during cooking
<b>Scallops</b>	Cook until flesh is milky-white or opaque and firm
<b>Leftovers, casseroles</b>	165° F

If you do not have a meat thermometer:

- Cook steaks to medium-well done
- Cook ground meat, poultry, and fish to well done
- Cook eggs until the yolks are hard

## **More Food Safety Tips**

### **Eating at Restaurants**

- For the first 3 months after transplant, choose cooked vegetables and fruits when eating out.
- Do not eat at buffet-style restaurants or from salad bars.
- Choose hot sandwiches. All sliced meats must be heated.
- Avoid sushi (raw or cooked), poke, or ceviche.
- Avoid using toothpicks and eating mints from an open bowl.
- Ask the server how the foods are prepared.

### **Cleaning**

- Before touching food, wash your hands for 20 seconds in warm, soapy water.
- Wash kitchen surfaces and tools with hot soapy water or bleach solution after each use.
- Wipe off the top of canned foods before opening them. Clean the can opener after each use.

### **Raw and Unpasteurized Foods**

- Avoid homemade fermented foods such as sauerkraut, kimchi, or yogurt.
- Avoid raw probiotic drinks such as kombucha or kefir.
- Avoid raw bean or alfalfa sprouts. If cooked, they are OK to eat.
- To wash fresh foods that are hard to clean, soak them in water first, then rinse with fresh water. This includes leafy greens, berries, and mushrooms.
- Bagged, pre-washed vegetables such as spinach and other leafy greens must be washed before eating.
- Heat frozen vegetables and entrees before eating.

### **Food Handling**

- Avoid smelling foods to check for freshness. You may breathe in mold spores.



- Avoid tasting raw or partly-cooked meats, poultry, eggs, fish, or shellfish. This includes cake batter or cookie dough that contains raw eggs.
- Avoid eating luncheon and deli meat directly from the package. Instead, you can:
  - Heat lunch meats in the microwave or on the stovetop before eating.
  - Freeze lunch meats and defrost them in the microwave when you are ready to make a sandwich.
- Marinate and defrost foods in the refrigerator, not at room temperature.
- If you defrost foods in the microwave, cook right after defrosting.
- Throw out canned foods that have bulges, dents, holes, or leaks.
- Use different dishes and utensils for raw and cooked foods.
- Throw away dishes, utensils, pots, pans, and cutting boards that are cracked. They are too hard to clean well.
- Clean the can opener after each use.

### **Refrigeration and Storage Tips**

- Refrigerate leftovers with 2 hours of preparing the food.
- Throw away leftovers after 3 to 4 days.
- Do **not** eat foods that have been left out at room temperature for longer than 2 hours. This includes foods such as meat, potato salad, or pasta salad at picnics or barbecues.
- Move food from hot pans to containers before putting it in the refrigerator. Use shallow containers to help food cool quickly.
- Keep refrigerator temperatures just below 40°F (4.5°C).
- Keep freezer temperatures at 0°F (-18°C).

### **Your Protein and Calorie Needs**

Eating extra protein and calories right after your transplant is important. Good nutrition helps your body:

- Heal your surgery wounds
- Fight infection
- Maintain muscle strength

Protein is even more important if you are on prednisone, since this medicine can cause muscle loss.

Protein is found in foods like lean meat, fish, poultry, eggs, milk, cheese, yogurt, beans, nuts, and seeds.

### Right After Transplant

- You will need to eat \_\_\_\_\_ grams of protein, eaten throughout the day.
- You will need to eat \_\_\_\_\_ calories a day.

### After About 8 to 12 Weeks

- Decrease your protein intake to \_\_\_\_\_ grams of protein, eaten throughout the day.
- Your dietitian may adjust your calorie needs based on your wound healing, your activity level, and to promote long-term healthy weight maintenance.

### High-Protein Foods

Protein Food	Serving Size	Protein Grams
Beans, cooked:		
- Black, garbanzo, kidney, pinto	½ cup	7
- Lentils, split peas	½ cup	8
Cheese:		
- Cottage cheese	¼ cup	6
- Hard (cheddar, Swiss)	1 oz.	7
- Ricotta	¼ cup	7
- Soft (goat, mozzarella)	1 oz.	5
- String	1 oz. (1 stick)	7
Eggs	1 whole, 2 whites, or ¼ cup egg substitute	7
Fish, canned:		
- Anchovies, sardines	1 oz.	7
- Salmon, tuna	1 oz.	7
Fish, cooked:		
- Fillet	3 oz.	21
- Salmon patty	3 oz. patty	21
Meat, cooked:		
- Chicken breast	3 oz.	21
- Hamburger, lean	1 patty, 3 oz.	21
- Pork chop	3 oz.	21
- Steak, lean	3 oz.	21

<b>Protein Food</b>	<b>Serving Size</b>	<b>Protein Grams</b>
<b>Milk:</b>		
- Whole, 2%, 1%, skim, or soy	1 cup	8
- Nonfat, powdered	¼ cup	10
- Whole, powdered	¼ cup	7
<b>Nuts and seeds:</b>		
- Almonds, peanuts, sunflower	1 oz.	6 to 7
- Cashews, flaxseed (ground), walnuts	1 oz.	4 to 5
- Nut butters	2 tablespoons	5 to 8
<b>Protein drinks:</b>		
- Ensure Clear, Glucerna	8 oz.	8 to 10
- Boost High Protein, Boost Plus, Ensure High Protein, Ensure Plus	8 oz.	13 to 16
- Boost VHC, Nepro	8 oz.	19 to 22
- Carnation Instant Breakfast mixed with 1 cup milk	8 oz.	13
Quinoa, cooked	1 cup	8
<b>Shellfish, cooked:</b>		
- Crab	1 oz.	6
- Scallops, steamed	1 oz.	7
- Shrimp	1 oz.	6
Tempeh	1 oz.	5
Tofu (soft, firm, extra firm)	3 oz.	5 to 9
Whey protein powder (protein content depends on brand)	1 oz.	12 to 20
<b>Yogurt:</b>		
- Greek	5.3 oz	12 to 18
- Regular	5.3 oz	5 to 6

### **How to Boost Your Protein Intake**

- Eat 5 to 6 small meals and snacks during the day instead of 3 large meals. Aim to include:
  - 20 or more grams of protein at each meal
  - 7 or more grams of protein at each snack
- Eat Greek yogurt in place of regular yogurt. Greek yogurt has 2 times more protein than regular yogurt.

- Add diced meat, beans, cheese, nuts, or seeds to salads, soups, and casseroles.
- For easy snacks, keep ready-made, protein-rich foods on hand such as hard-boiled eggs, cheese sticks, single-serving yogurts, unsalted nuts, and trail mix.
- Spread nut butters or hummus on toast, crackers, or raw fruits and vegetables.
- Try ricotta or cottage cheese with fruit, vegetables, or mixed into casseroles.
- Add a glass of milk or protein drink to your meals or as a snack.
- Add protein powder or powdered milk to casseroles, soups, or oatmeal.
- Make your own smoothie using Greek yogurt, milk, protein powders, tofu, or other high-protein foods.
- Include whole grains such as quinoa and high-protein cereals and breads in your diet.

## **Fluid Needs**

- Your goal is to drink \_\_\_\_\_ liters of fluid every day. This equals \_\_\_\_\_ cups or \_\_\_\_\_ oz.
- Please ask your doctor if they have a specific fluid goal for you.
- We may ask you to write down what you drink to help keep track of your fluid intake.

## **How to Meet Your Daily Fluid Goal**

- Drink even when you're not thirsty.
- Sip liquids slowly and pace yourself during the day.
- Drink a small amount before, during, and after meals and snacks.
- Set a timer or alarm to ring every 1 to 2 hours to remind yourself to drink fluids.
- Carry a full water bottle wherever you go.
- Limit coffee, tea, and soda that contain caffeine.
- Do **not** drink energy drinks such as Red Bull, Monster, and Rock Star.
- Whenever you can, choose healthful drinks such as water, milk, unsweetened tea, smoothies, low-sodium vegetable juices, flavored or sparkling waters, or nutritional supplements.

## Blood Glucose and Carbohydrates

Some of the medicines you are taking can raise your blood *glucose* (sugar) levels. **Carbohydrates in foods also raise your blood glucose levels.** To improve your blood glucose control, learn which foods raise these levels, eat the right portion sizes, and limit simple sugars in your diet.

Foods with Carbohydrates	Foods with Little or No Carbohydrates
Fruits and fruit juice	Most vegetables
Starches: Grains, beans, and starchy vegetables	Meat, poultry, fish, eggs, cheese, and meat substitutes
Milk and yogurt	Fats (butter, oil)
Sweets and snacks	

### Examples of 1 Carbohydrate Serving

#### Fruits

- ½ banana
- 4 oz. juice
- 1 small piece fruit

#### Starches

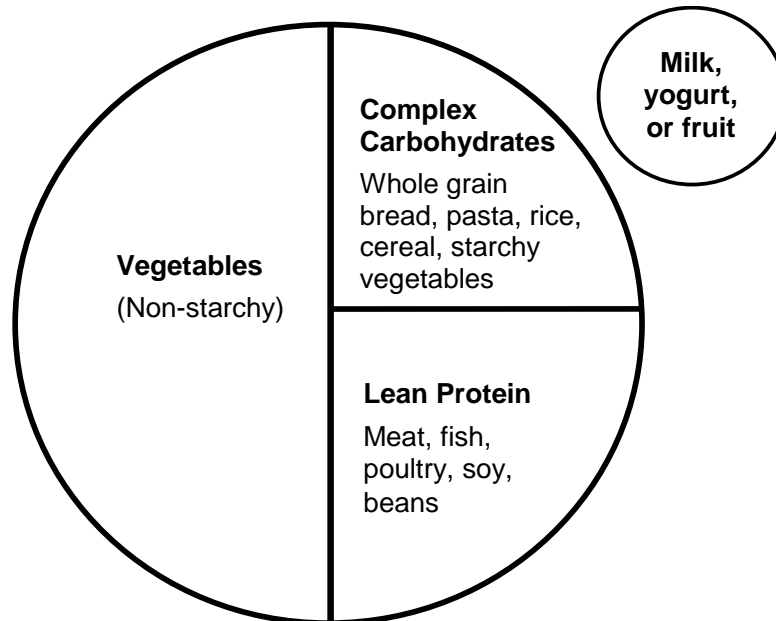
- 1/3 cup cooked rice or pasta
- 1 slice bread
- ½ cup corn, beans, or peas
- ½ cup hot cereal
- 1 small tortilla

#### Dairy

- 1 cup milk
- 1 cup “lite” yogurt

## Healthy Plate Model

Use the picture below to plan your meals. Include protein with all meals. Fill half your plate with **non-starchy vegetables** (these do not contain a lot of carbohydrates, but provide good nutrients) and **fiber**, which helps you feel full.



Limit or avoid simple sugars such as juice, regular soda, sugar, syrups, and candy. These foods tend to quickly raise blood glucose levels without providing many nutrients.

Basic meal goals (*your needs may be different*):

- Women: about 3 to 4 servings (45 to 60 grams carbs)
- Men: about 4 to 5 servings (60 to 75 grams carbs)

## Potassium

The mineral potassium keeps muscles and nerves working well. Too much or too little potassium can affect your heart.

Medicines such as cyclosporine and tacrolimus can make your potassium blood levels higher than normal. This means you may need to limit your dietary intake of potassium for a short time.

Potassium-rich foods have many health benefits. Once your blood levels are stable, it's important to increase your servings of potassium-rich foods.

## **Foods High in Potassium**

- Apricots
- Artichokes
- Avocado
- Bananas
- Beans, dried (cooked)
- Beets and beet greens
- Broccoli, cooked
- Brussels sprouts
- Coconut, coconut milk, coconut water
- Dairy (milk, yogurt)
- Dark leafy greens (kale, spinach)
- Fruit, dried
- Fruit and vegetable juices
- Kiwi
- Mango
- Melons (honey dew, cantaloupe)
- Nectarines
- Nutritional supplements (Ensure, Glucerna)
- Oranges
- Potatoes, sweet potatoes
- Prunes, prune juice
- Some sports drinks
- Tomatoes, tomato products
- Winter squash (acorn, butternut, pumpkin)

## **Magnesium**

Magnesium is vital for our bodies to work well. It helps maintain muscles, prevents cramping, helps control blood pressure and blood glucose, and keeps our heartbeat steady.

Tacrolimus and cyclosporine may deplete your magnesium. You may need to take pills to keep your levels in a healthy range. If you eat magnesium-rich foods every day, you can reduce your need for more supplements. Foods high in magnesium also contain fiber, protein, and phosphorus.

### **Tips for Increasing Magnesium**

- Make your food your medicine. Eat a variety of high-magnesium foods every day.
- Crush magnesium tablets if they are hard to swallow. Crushing may help your body absorb the mineral.
- Some people have diarrhea when they take a high dose of magnesium. Tell your provider if this happens. A different form of magnesium may work better for you.

## **Foods High in Magnesium**

- Beans and peas
- Chocolate and chocolate milk
- Coffee
- Fish and other seafood
- Fruits such as avocado, dried fruit, bananas
- Nuts and seeds, nut butters
- Quinoa
- Soy milk
- Vegetables such as artichokes, potatoes, corn, spinach, tomatoes
- Whole grains such as brown rice, wild rice
- Whole grain cereals and bran

## Phosphorus

Our bodies use phosphorus to form bones and teeth, support kidney and muscle function, keep our heartbeat normal, send nerve signals, and help us process nutrients.

It is important to include high-phosphorus foods in your diet if your blood levels are low. Phosphorus supplements may be needed if diet alone does not raise blood levels.

Phosphorus levels can be high after transplant. This is a short-term problem. It does not usually mean you need to limit your dietary intake of phosphorus. Your healthcare provider will tell you if you need to follow a low-phosphorus diet after transplant.

### Foods High in Phosphorus

- Bran cereal
- Dairy products
- Dried beans
- Fish
- Lentils
- Meat
- Pork
- Poultry
- Soy and soy products
- Split peas

## Calcium and Bone Health

One long-term side effect of taking prednisone is bone and joint weakness. To help avoid *osteopenia* (low bone mass) and *osteoporosis* (brittle bones), you must eat enough calcium, phosphorus, and vitamin D every day. Even if you are not taking prednisone, calcium is important for your bone health.

Include several servings of calcium-rich food in your daily diet. If you do not choose to eat calcium-rich foods, you may need to take a calcium supplement.

### Foods High in Calcium *(Calcium content in these foods may vary)*

Food	Serving Size
Bok choy, boiled or steamed	1 cup
Broccoli, boiled or steamed	1 cup
Collard greens, boiled or steamed	1 cup
Kale, boiled or steamed	1 cup
Milk	1 cup
Yogurt	1 cup
Cheese	1 oz.
Orange juice, with added calcium	1 cup
Salmon	3 oz.
Soy or almond milk, with added calcium	1 cup
Tofu, firm (processed with calcium)	½ cup
Sesame seeds	2 tablespoons



## Part 2

# Long-Term Changes and Nutrition Care

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Starting about 2 months after your transplant surgery, it is time to start focusing on your long-term goals:

- **Eating well**
- **Low-sodium diet** – Helps keep blood pressure under control.
- **Calcium and vitamin D** – Help keep your bones strong.
- **Heart health** – Choose healthy fats and high-fiber foods to control cholesterol and triglycerides.
- **Weight control** – A healthy weight is good for your overall health.

## Eating Well

- Eat a balanced diet by choosing a variety of colorful foods. Include fruits and vegetables throughout the day to increase your nutrient and fiber intake.
- Review the healthy plate model (see page 13). Fill  $\frac{1}{2}$  of your plate with vegetables,  $\frac{1}{4}$  with protein foods, and  $\frac{1}{4}$  with carbohydrate foods.
- Choose lean sources of protein such as chicken, fish, pork, beans, nuts, or tofu.
- For carbohydrates, choose whole grain items such as brown rice and whole wheat pasta. Whole grains are higher in fiber and may lower cholesterol and control blood glucose.
- Snack on fruit.
- Be sure to include nonfat or low-fat dairy for calcium.

## Low-Sodium Diet

A low-sodium (low-salt) diet is healthy for everyone. To help keep your blood pressure under control, forget about the salt shaker and choose low-sodium foods.

Sodium is sneaky! Salt increases the shelf-life of food, so packaged and prepared foods usually contain a lot of salt. It is very important to read the “Nutrition Facts” label so that you know how much sodium you are eating.

## Tips to Reduce Sodium

**We advise eating 2,000 mg of sodium a day.** To help reduce your sodium intake:

- Do **not** add salt when cooking or at the table.

- Cook at home from scratch. Use fresh produce and meats. This allows you to control the amount of sodium.
- Season foods with spices, herbs, lemon juice, and vinegars instead of salt.
- Choose products labeled Without Added Salt, No Salt Added, or Unsalted.
- Limit your intake of fast foods and packaged foods.
- Check out low-sodium cookbooks or food blogs for recipes and ideas.
- Read the “Nutrition Facts” label to find the sodium content of packaged foods (see example on page 20):
  - For a main meal, avoid foods with more than 600 mg sodium per serving.
  - For a side dish or condiment, avoid foods with more than 150 mg sodium per serving.

## Reading Food Labels

The “Nutrition Facts” label was updated in 2016. When you read a label, focus on serving size, total carbohydrate, protein, and potassium content.

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
<i>Trans Fat</i> 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Calcium and Vitamin D

Calcium and vitamin D help keep your bones strong. But, long-term use of prednisone increases your risk of osteoporosis, bone fractures, and joint weakness. Even if you are not taking prednisone, make sure you are getting enough calcium to keep your bones healthy.

These foods are high in calcium, vitamin D, and phosphorus. Most of them are also good sources of protein:

- 1 cup milk (cow's milk, soy milk, and almond milk with added calcium and vitamin D)
- 1 cup yogurt or ½ cup Greek yogurt
- 1 oz. cheese
- ½ cup cottage cheese
- ¾ macaroni and cheese
- 3 oz. tofu (processed with calcium)
- 3 ounces salmon with bones, canned

**Try to eat 4 servings of low-fat, calcium-rich foods every day.**

These will also add to your protein intake.

If you do not eat high-calcium foods, you will need to take a calcium supplement. Talk with your doctor or dietitian about what type of supplement would be best.

## Heart Health

Over time, the medicine tacrolimus may raise your cholesterol and triglyceride levels. This can increase your risk of heart disease.

A heart-healthy lifestyle will help prevent heart problems. To keep your heart healthy:

### Exercise

Exercise for 30 to 60 minutes at least 5 days a week. Some types of heart-healthy exercise are:

- Aerobics
- Biking
- Gardening
- Housework
- Running
- Strength training
- Swimming
- Walking
- Yoga

### Weekly Exercise Goals

I will:

- \_\_\_\_\_ for \_\_\_\_\_ minutes \_\_\_\_\_ days a week.
- \_\_\_\_\_ for \_\_\_\_\_ minutes \_\_\_\_\_ days a week.

## **Choose Heart-Healthy Foods**

- **Increase your fiber intake to 25 to 35 grams a day.** Fiber binds to fat and cholesterol so you don't absorb as much. Sources of fiber include beans, whole grains, fruits, and vegetables.
- **Add more heart-healthy fats to your diet.** Unsaturated fats and omega-3 fatty acids may lower cholesterol and triglycerides:
  - Heart-healthy fats are found in avocado, olive oil, canola oil, ground flaxseed, chia seeds, hemp seeds, and walnuts.
  - Eat 2 to 3 servings of fish every week. Salmon, tuna, and mackerel are good sources of healthy fats.
- **Limit your intake of saturated fats:**
  - Choose low-fat or nonfat dairy products.
  - Limit red meat intake to 2 times a week. When you eat meat, choose lean cuts such as loins or rounds.
  - Limit your intake of fried foods and butter.
- **Limit your sodium intake.** (See "Low-Sodium Diet" on page 19.)
- **Ask your doctor** if you have questions about drinking alcohol.

## **Weight Control**

It is important to be at a healthy weight before and after your transplant. Being at a healthy weight will:

- Reduce your risk of heart disease
- Lower your risk of getting diabetes
- Improve your blood pressure
- Improve your blood glucose control (if you have diabetes)
- Ease joint and back pain
- Increase your energy

After transplant, you will be feeling better and have fewer limits on your diet than you did before transplant. As a result, your appetite may increase.

Taking medicines such as prednisone may increase your appetite even more. This can lead to overeating and weight gain.

## **Tips for Keeping a Healthy Weight**

- Plan to include regular exercise as part of your lifestyle after transplant. Exercise helps control weight and builds muscle.

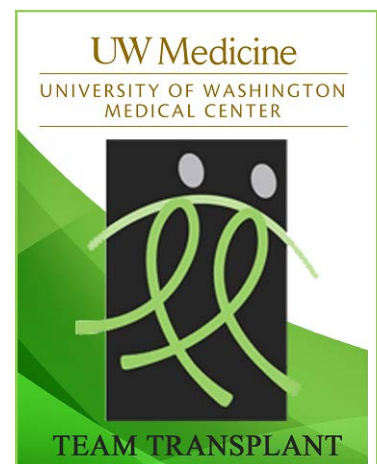
- Eat from a smaller plate or bowl than usual. This tells your mind that you are eating more food.
- During the day, eat 3 small meals and 1 snack.
- Wait 20 minutes before getting extra helpings. It takes that long for your body to feel full after eating.
- Limit sweets and sugars. Eating sugary foods can leave you feeling more tired and cause hunger between meals.
- Chew on gum instead of eating between meals.
- Drink plenty of water
- Try these low-calorie, low-fat snacks:
  - Baked chips with salsa
  - Fresh fruits
  - Low-fat yogurt
  - Plain popcorn
  - Raw vegetables and low-calorie dip
  - Sugar-free popsicles

**My healthy weight goal is \_\_\_\_\_.**

## Join Team Transplant!

Team Transplant is a running and walking support group for transplant recipients and donors. The group is made up of transplant recipients, donors, caregivers, family, and friends who value health, physical fitness, and the chance to regain life through organ transplant.

Since 2001, Team Transplant has been dedicated to raising organ donation awareness and ensuring the future health of those who have had, or will have, an organ transplant. As we train for and walk, jog, or run in local half-marathons and other races, our green-clad team brings attention to the issue of organ donation and its benefits.



## Why should I join Team Transplant?

- You will have a lot of fun!
- The training will increase your fitness and energy levels.
- You will train in a safe, friendly, and supportive environment with your own personal coach.
- You will also find that being a part of Team Transplant – whether or not you compete in a race – can be incredibly rewarding and motivating.

When you join Team Transplant, you will not only benefit your own health – you will also be a symbol of health and fitness for others. To learn more, email [teamtx@uw.edu](mailto:teamtx@uw.edu) or visit [www.uwmedicine.org/teamtransplant](http://www.uwmedicine.org/teamtransplant).

***Don't just survive ... Thrive!***

### Table: How Transplant Medicines Affect Your Nutrition Care

Effects	Caused By	What You Can Do
Diarrhea	Antibiotics and antivirals Cyclosporine Magnesium supplements Mycophenolate Tacrolimus	- Do not drink liquids with your meals, or for 30 minutes before and after eating. - Eat foods with soluble fiber, such as applesauce, bananas, or oatmeal.
Fluid retention	Prednisone	- Limit sodium and salty foods. - See "Low Sodium Diet" on page 19.
Slow wound healing	Prednisone Sirolimus	- Eat enough calories and protein. - Talk with your healthcare provider about supplements.
High potassium levels	Tacrolimus Cyclosporine	- Limit high-potassium foods. - See "Potassium" on page 14.
Low magnesium levels	Tacrolimus Cyclosporine	- Your provider may prescribe supplements. - Include diet sources if advised. - See "Magnesium" on page 15.
Low phosphorus levels	Tacrolimus	- Your provider may prescribe supplements. - Include diet sources if advised. - See "Phosphorus" on page 16.

<b>Effects</b>	<b>Caused By</b>	<b>What You Can Do</b>
High blood glucose	Cyclosporine Prednisone Sirolimus Tacrolimus	<ul style="list-style-type: none"> <li>- Limit foods that are high in sugar, like desserts, candy, jelly, soda, and fruit juice.</li> <li>- Control portion sizes.</li> <li>- Be physically active.</li> <li>- See “Blood Glucose and Carbohydrates” on page 12.</li> </ul>
High blood pressure	Cyclosporine Tacrolimus	<ul style="list-style-type: none"> <li>- Limit sodium and salty foods.</li> <li>- See “Low Sodium Diet” on page 19.</li> </ul>
Anemia	Cyclosporine Mycophenolate Prednisone Tacrolimus	<ul style="list-style-type: none"> <li>- Your provider may prescribe iron supplements and iron-rich foods.</li> <li>- Eat foods that are high in vitamin C at the same time you eat iron-rich foods to help absorption.</li> <li>- Do <b>not</b> take iron supplements at the same time as calcium-rich foods and supplements.</li> </ul>
Problems with how medicines work	Cyclosporine Sirolimus Tacrolimus	<ul style="list-style-type: none"> <li>- Avoid grapefruit, grapefruit juice, pomegranates, pomelos, pomegranate juice, and starfruit.</li> </ul>
High cholesterol and triglyceride levels	Cyclosporine Prednisone Sirolimus Tacrolimus	<ul style="list-style-type: none"> <li>- Limit saturated and trans fats.</li> <li>- Eat healthy fats like olive or canola oil, nuts, and salmon.</li> <li>- Limit foods that are high in sugar, like desserts, candy, jelly, soda, and fruit juice.</li> <li>- Control portion sizes.</li> <li>- Be physically active.</li> <li>- See “Heart Health” on page 22.</li> </ul>
Increased appetite and weight gain	Prednisone	<ul style="list-style-type: none"> <li>- Be physically active.</li> <li>- Control portion sizes.</li> <li>- Limit high-calorie foods.</li> <li>- Include high-fiber foods in your diet.</li> <li>- Limit drinks that contain sugar.</li> <li>- See “Weight Control” on page 24.</li> </ul>
Loss of muscle mass	Prednisone	<ul style="list-style-type: none"> <li>- Eat high-protein foods.</li> <li>- Be physically active.</li> </ul>
Decreased absorption of calcium and low bone density	Prednisone	<ul style="list-style-type: none"> <li>- Eat dairy foods every day.</li> <li>- Your provider may prescribe calcium and vitamin D supplements.</li> <li>- See “Calcium and Vitamin D” on page 21.</li> </ul>

**Notes**

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**Questions?**

Your questions are important. Talk with your dietitian if you have questions or concerns.

Dietitian: \_\_\_\_\_

Phone: \_\_\_\_\_