

# Plasmalympics: Cleaning Your Blood

## Take Me To Your Liver

### Activity Suggestion

#### Activity 4A

#### Note:

This activity suggestion describes how specific content might be taught to middle school students. It does not contain fully developed lesson materials, which we hope to develop under future funding in this content area. Any feedback on how you are able to use this lesson suggestion would be greatly appreciated. Your comments can be sent to us at [teachhealthk-12@uthscsa.edu](mailto:teachhealthk-12@uthscsa.edu).

#### Activity Focus:

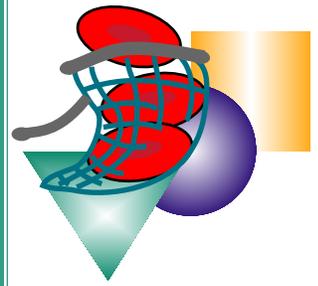
Students will focus on learning about the largest internal organ in the body - the liver and its importance to their health, its amazing resilience, the common problems of the liver and how to avoid them. Students will investigate how viruses, genetics, drugs, poisons or drinking too much alcohol may cause different types of liver diseases, including cirrhosis; hepatitis A,B, and C; hemochromatosis; and liver cancer. They will also learn about the progression of liver disease. Most importantly, students will learn how to watch for signs and symptoms of liver disease and how to protect their liver by making healthy lifestyle choices. Students will make a presentation to the class. Likewise, they will share the information they have learned with their families, armed with information to help make positive changes that may impact long-term health.

#### Activity Rationale:

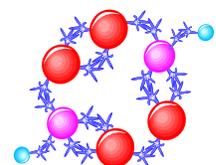
It is important that students understand the structure and function of the liver in the human body and how to make healthy, educated choices that lead to the prevention of liver disease. This investigation will help students understand the liver's role in maintaining health, help students identify symptoms of liver problems and how to make more desirable lifestyle choices for themselves.

#### Suggested Methodology:

Students will randomly draw a research card from a stack of common liver diseases prevalent in America. Also, students should find out why a person can donate part of their liver to another person and live a long,



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healthy life afterwards. Students should determine the structure and function of the liver, where it is located, and how their selected liver problem interferes with normal liver function. The teacher will provide the criteria for the project, hot links list and the various presentation formats to choose from. For example, the student may wish to present their research in the form of a PowerPoint™, Movie Maker™, Inspiration™ (concept map), etc. The requirements for the project may include a picture or illustration of the anatomy and physiology of the liver, diagnosis and symptoms, treatment, alternative therapy, specific conditions, genetics, statistics, a scientist/researcher and the clinical trial, and related issues. After the requirements of the project are developed and approved by the teacher, the student will be allowed to earn extra credit by adding animations, video clips, etc.

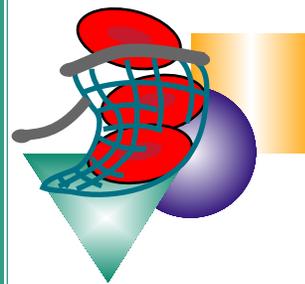
## Suggested Resources:

Mayo Clinic Website

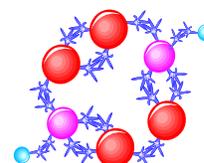
<http://www.mayoclinic.com/print/liver/DG00038/METHOD=print>

National Library of Medicine

<http://www.nlm.nih.gov/medlineplus/liverdiseases.html>



# Activity Suggestion, continued



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